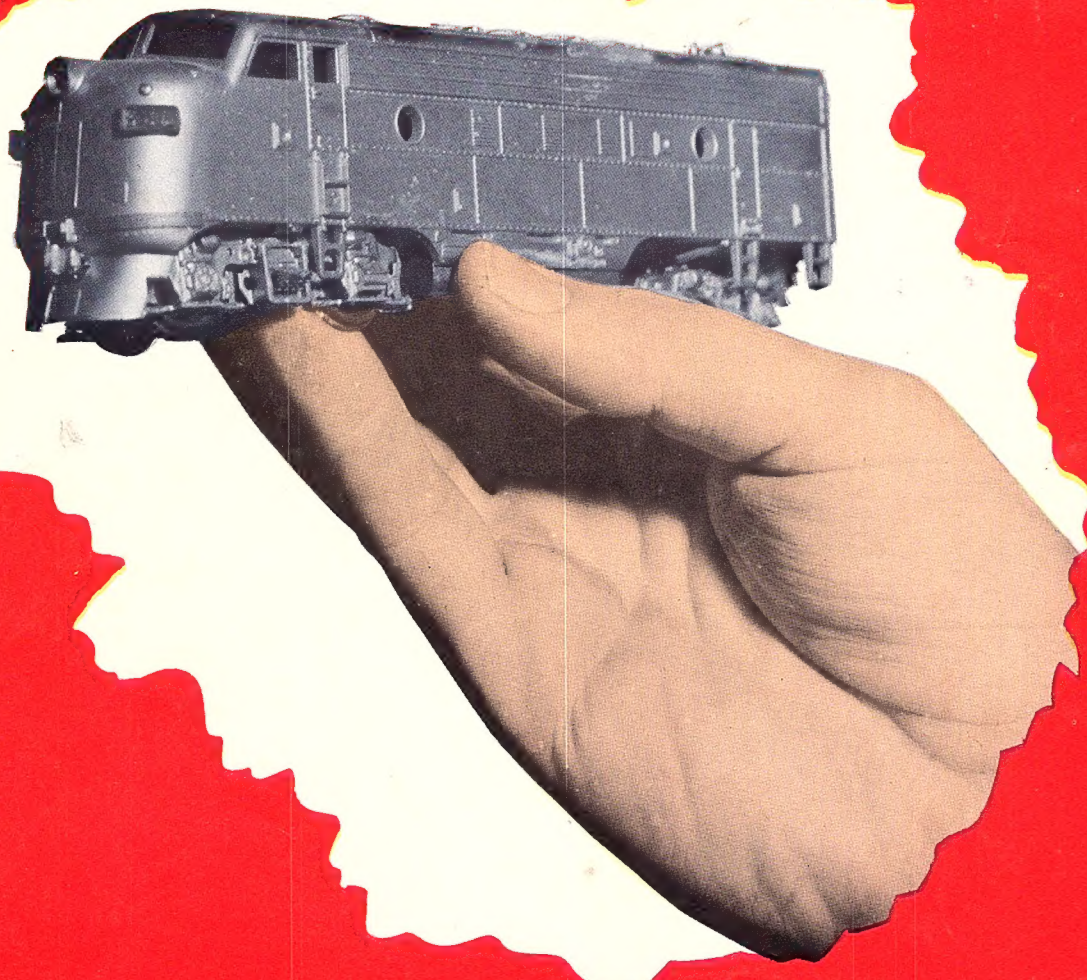
RAILROAD MODEL CRAFTSMAN

OCTOBER 1957
50 CENTS



IN THIS ISSUE!

Russ Porter

Bill Schopp

Don Graff

Hiawatha Atlantic
Medium Size Layouts

SILVER STREAK

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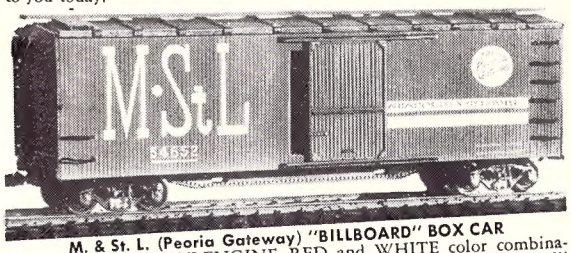

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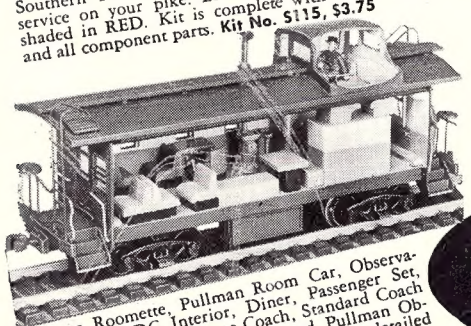

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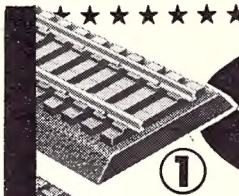

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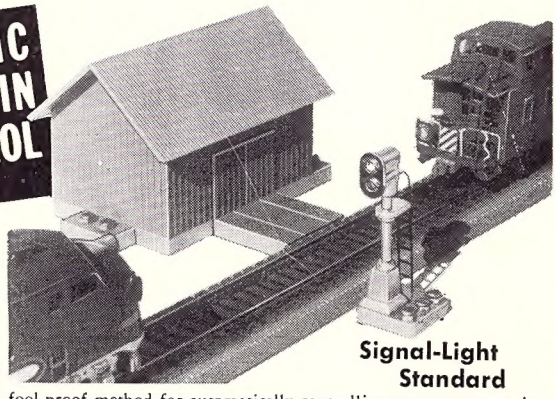

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Vol. 26, No. 2

RAILROAD MODEL CRAFTSMAN

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for OCTOBER 1957

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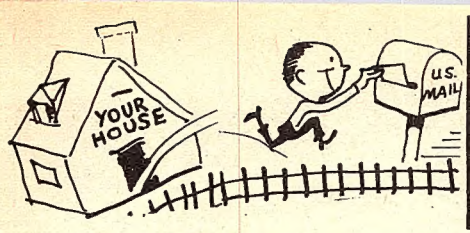

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Lobaugh Pacific 4-6-2 (195) 139.50
Lobaugh Pacific 4-6-2 ..... 115.00
Scalecraft SP Mountain 4-8-2, 1 at .. 99.50
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Free Lance Old Type Ten-Wheeler (125) 62.50

Articulateds—Mallets:

C&O No. 1600 2-6-6-6 (595) 365.00
Waller 2-10-10-2 (1,100.00) 895.00
Lionel: NYC Hudson 4-6-4 No. 700 E super w/K&D motor, Lobaugh sculen drivers and special gear reduction box (195) 175.00
No. 700E Super Scale (160) 140.00
No. 700E 3 Rail (150) 135.00
No. 763 2R Hudson w/long tender (125) 89.50
No. 701 Scale Pennsy Switcher 0-6-0 . 69.50
No. 701 Scale Pennsy Switcher 0-6-0 No. R 79.50
No. 8976 0-6-0 Lionel Tinplate wide radius 79.50
7 different NYC Hudson w/Lionel or Scale tender $100.00 value each 59.50 to 79.50

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Over 1000 Passenger & Freight Cars some magnificent deluxe plus. All will be sold this summer. Real big Savings!! Liquidating these and more! more!

Complete set GN "passenger" 7 orange and green cars, Bagg to Observ. (300) 175.00
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Plain coach, Lobaugh trucks 20.00
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Nickel Plate Coach w/o interior 17.00
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SP Combination painted green 20.00
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Athearn, Walthers & Scalecraft $15-$20 ea. ..... 5 for 50.00
Other cars, $10 each ..... 5 for 25.00
6 assorted NYC cabooses, choice ... ea. 9.00
5 Pennsy Conventional cars w/gold stripe 50.00

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Walthers Pullman Kit, pair 18.00
Kemtcraft A unit outside 2R single power 65.00
Club grill diner lettered, pullman ... 15.00
Seaboard JC Body, No trucks, green. . . 5.00
Dixie Flyer coach, scratched, 6 whl trks 5.00
CN&W Gas Electric (as is) 20.50
Gray Wrecking Crane 65.00
Take your pick! Help us Clean House!

O Scale KITS & MISC.

Here's just a few of our huge selection:

Ribbonrail Track Cleaning Car. No. 0-1 with trucks less couplers (7.50 reg). 6.50
International 3 Dome Tank 8.00
Int Hopper 1 only 5.00; Int Stock car. 5.95
Int Pacific Tender 8.50
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O Scale Trucks: per pair
LOBAUGH: 6 whl pass 4.00; 4 wheel tender 2.50

Quality SCALE BUILDING KITS

For Lionel, Flyer, O Scale. By Suydam. Exciting Realism. Easy-to-build! Very popular. Following are die cut corrugated metal:

01 Furniture Factory w/fine detail... 6.25
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These are wood & corrugated metal:

010 Pump House-Water Co. w/pump, house, pumping tower & storage tank 4.25
011 Sawmill & Shed w/outhouse, incinerator, cyclone & piping 4.25
061 Interlocking Tower & Shed. Includes "electric" interlocking machine 4.25

These are deluxe all wood kits:

054 MH Tool House w/windows & Safety signs ..... .125
055 MH Wayside Waiting Room, P.R.R. prototype 1.75
056 MH Station Platform for all type platforms 1.95
053 MH Passenger Shelter, shingle-roof, floor, and siding 1.25

NEW COMPLETE $1.59 and up O GAUGE CAR KITS For Lionel O27 or O & O Scale

Sensational! We've never before been able to offer anything like these freight car kits. Complete! Yes, everything you need at these unbelievable prices! Try one—you'll want a whole set. Authentic detail & coloring. Real road names. Perfect scale. Easy to Build w/screw driver and plastic cement (.15). Has couplers that work w/Lionel. Trucks too!! Please list alternative road names. We've sold out twice!

FLAT CARS: MKT, GM&O, L&N, or B&O 1.59
GONDOLAS: NKP, N&W, WM, P&LE, Rding 1.69
BOX CARS: MKT, PRR, M&StL, UP, RI, NH 1.98
CABOOSES: SL-SF, CB&Q, MP, SR, MKT, NH 1.98
HOPPER CARS: Wabash, NYC, C&EI.. 2.29
TANK CARS: Dow, DuPont, Cities Service w/dome platform 2.29
DIESEL DUMMY: MKT, Frisco, MP, NH, Burlington, SR, each 2.50
POWERED DIESEL: Frisco, MKT, MP, NH, Burlington, SR, Torque motor, direct current 9.00
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Remote Uncoupler FREE w/set 6 cars (1 ea. kind)
Kusan Track listed under O Scale Misc.
Back in stock—Walthers Pickle Car Kit with trucks. Couples w/Lionel 4.75
Few left—Westbrook Special Cabooses. 6.50
3 left-Rail Chief wood O Station Platfm 1.95
PB 40' 027 Reefer Kits Complete 3.95

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Ambroid quality wood kits, super detailed, knuckle couplers, trucks. Complete, Fine!
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Gargraves: Realistic scale appearance, wood ties, bend to any desired pattern, terrific:
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Gargraves Stainless Flexible Track, 3' sec. 1.20
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3' curvable sec for 027 . .50
Terrific Over & Under Trestle Set—Hardwood, 10 pcs up, 10 pcs down special 4.95
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H513 Hi-Rail Double Crossover Kit 19.50
Hi Rail Peare Switch Kits—use with Lionel. Left, Rite or Wye. Reg 4.50 3.65
Every Wanted Extra for Lionel—Always!

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Gargraves switches manual, Rt or Lt ea. 4.50
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New 3360 Operating Burro Crane ($16) .. 11.95
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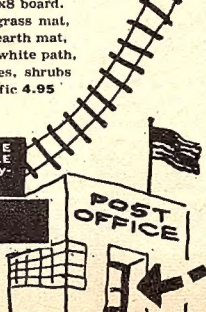

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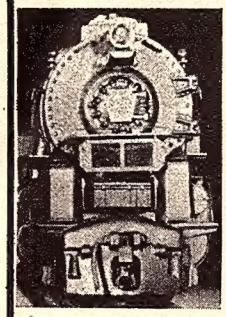
RAILROAD MODEL CRAFTSMAN

What's NEW in O gauge?



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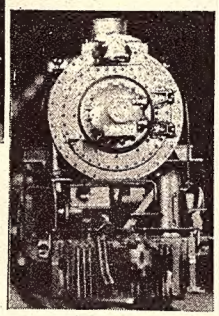
NEW Penn. "J" 2-10-4, as "super" a model as ever made . . .



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Rx Simple Scenery

Colonel Van Auken's comments concerning the handling of the orthopedic plaster (Simple Scenery, RMC Mar. '57) was very timely and important. Certainly the handling of a moistened roll of plaster is difficult except for the physician or technician who uses it frequently and is familiar with the technique. Strips of plaster which are individually applied is the method of choice when using this material.

One additional use of this method is to provide a suitable backdrop on a layout. Strips of plaster may be hung from the ceiling and brought down to the edge of the layout. This may then be painted the proper colors and may also give sufficient depth between the plaster and the wall in which to install electric lights. In fact, the plaster will provide a strong light-weight material to cover any long distance without resorting to the use of wooden or metal supports.

Johnson & Johnson recommend their Blue Label brand **Specialist** bandages and splints as being most suitable for modeling and scenery purposes.

Merle S. Scherr, M.D.
Charleston, W. Va.

If you are interested in this material, check with the local surgical supply house in your area (telephone yellow section). All Johnson & Johnson dealers know of this material since they received a reprint of the article. Ed.

Did You Ever?

In the Dispatchers Report (April '57 RMC) you had a very interesting item entitled "In The Lounge Car." I read this to my wife and told her that I was going to read it at the Spring Flint Model Railroad Banquet. At the start of the banquet, my wife said she had something to read after I read your article. The members, mostly wives, said it should be sent to you. Following is Margaret Abrams' reply to you:

Did you ever want your husband to call your children in for supper only to find him so engrossed in the latest Railroad Model Craftsman that he didn't hear you? Did you ever wait longingly for your hubby to come home after a long day at work, only to be greeted with, "Did my railroad magazine come in the mail today?"

Did you ever look for your best tweezers only to find they have gone the way of your best scissors, little kitchen screw driver, empty jewelry boxes, lozenge boxes, and any other little containers so handy for storing screws, little

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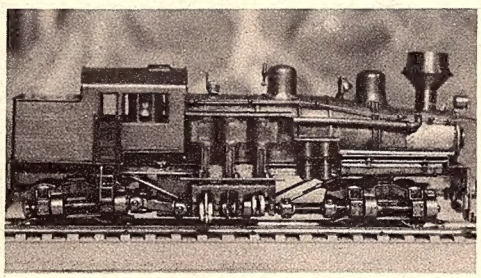

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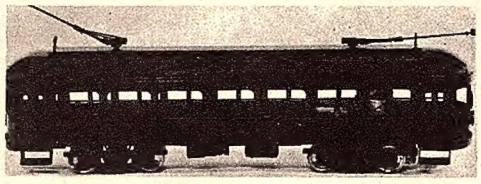

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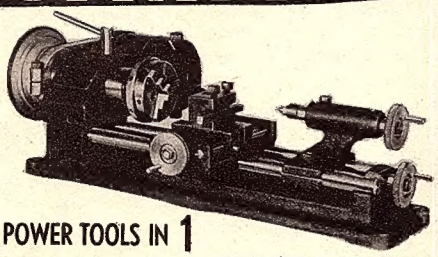

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PRICE $99.50

1 LATHE
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4 MILLING MACHINE
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8 CIRCULAR SAW
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PRECISION BUILT TO GIVE PRECISION RESULTS AT TOLERANCES WITHIN .0004 INCH.

A COMPLETE MINIATURE POWER WORKSHOP ON ***ONE BASE!***

DB 200 Basic unit

Consists of the Precision Lathe and all attachments necessary to set up these 6 machines. Also includes a quiet running, vibration-free 70 watt AC DC power motor which is guaranteed for one year and has built-in suppressor to eliminate radio and television interference; pulley sheaves and belts with which to obtain 11 speeds (375 r.p.m. to 9200 r.p.m.); self-centering 3 jaw 'Cushman' (reversible) universal lathe chuck, swing Dia. 2.84", 3 jaw 'Jacobs' Drill chuck, opens to 1/4", pivoted tool holder, 2 centers, lathe dog, face plate, grindstone holder, Allen Wrench, easy-to-follow instruction manual, all packed in sturdy wood veneer carrying case. Catalogue of cutting tools, drill bits and other accessories. All additional attachments may be obtained separately, thereby enabling the buyer to acquire only those attachments for which he has particular use. New attachments will be issued regularly.

ATTACHMENTS & ACCESSORIES

DB 107	Jig Saw & 2 blades	19.00
DB 1230	Circular Saw & 2 blades	9.50
DB 1270	Threading Attachment, complete	31.50
DB 1260	Index & Dividing Att.	15.50
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DB 1020a	Add'l Collet Chucks, ea.	3.90
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Powered by ATHEARN heavy duty motor — Metal underframe — Metal wheels

GEAR DRIVE	decorated	$16.95	undecorated	$15.95
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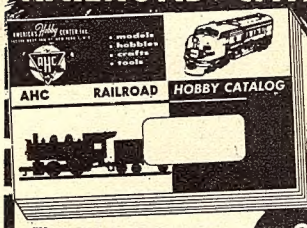

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Did your daughter ever come crying, wondering what happened to her water paints and best paint brush, only to find them well nigh unto being worn out by scenery-painting father? Did you ever ask your better half to go downstairs for a jar of jam and have him stay long enough to pick the berries, wash them, cook them, strain them, and then have it dawn on you that he had to pass the layout to get to the jelly cabinet?

Did you ever come home and find your husband pulling straws out of your new broom, tediously cutting them into tiny bits and bedding down his HO cattle in a new stock car? Did you ever dye slip covers green and have to save a small amount of concentrated dye so that the layout's foliage could take on a new spring color?

Did you ever go on a vacation in the North Woods with the luggage compartment packed just so—so everything would fit in, only to acquire a box of moss and lichens the first day out and have to make a choice of having them as traveling companions in the front seat with you or throwing your favorite overnight bag in the ditch to make room for the box in the back?

Did you ever ask your husband to take the tin cans out of the garage and meet him coming back in the house with some piece of junk you threw out yesterday and giving you that, "Well, maybe I can use it," look?

Did you ever dye some weed stalks to make a fall bouquet and have your husband make fun of your efforts, only to catch him doing approximately the same thing to weeds for trees on his layout and say, "Well, that's different!"

Did you ever feel it was time to suggest that the basement should be cleaned, only to find your favorite engineer with mop and broom putting the basement in shipshape order, announcing, "I'm entertaining the railroad club tomorrow." Ah, what a thrill! What a hubby! What a HOBBY!

Vincent L. Abrams
Flint, Michigan

Heaven help the Flint Model Railroad Club if Wife Maggie ever organizes a Women's Auxiliary! And we'll bet a pair of non-mating HO couplers that we know who brews the coffee for the gang, too. Ed.

Railroad Crossing

Do you think I'm off my rocker having this buckboard sign in my back yard? No sir, I'm normal. Everyone else is balmy. This buckboard was donated along with the Liberty emblem by the Jersey Central for our North Jersey Midland Model Railroad Assoc. What a battle I had with the **warden** before I could get her to go along with me on the project for installing same.

When the fury of the battle dies down, I will install green reflecting letters on a board with my own **Green Brook Lines** inserted. The caboose marker light at peak of the post has been wired up electrically.

Dave Sacks
N. Plainfield, N. J.

Can't see how the above letter will

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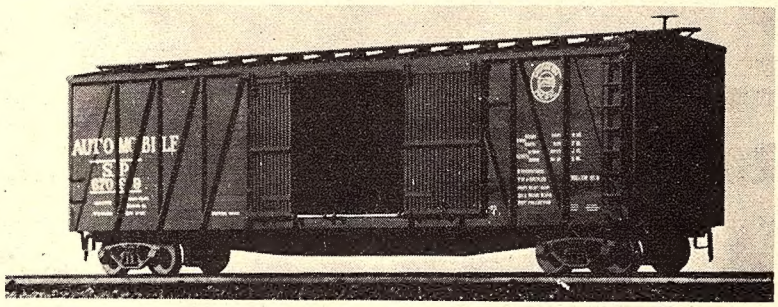

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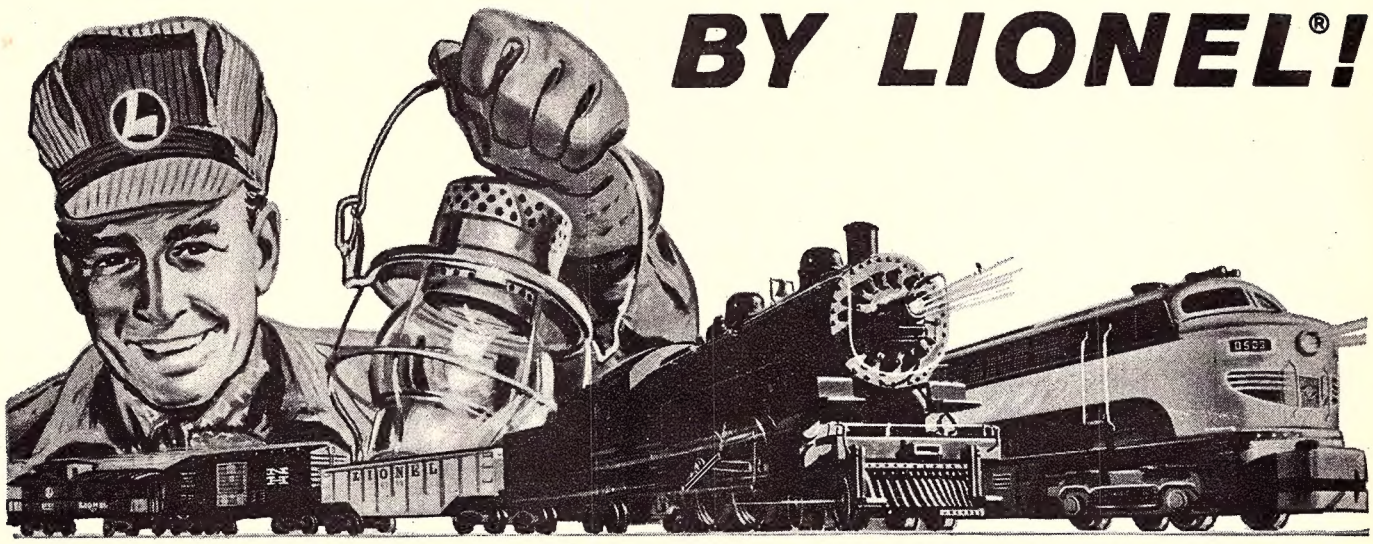

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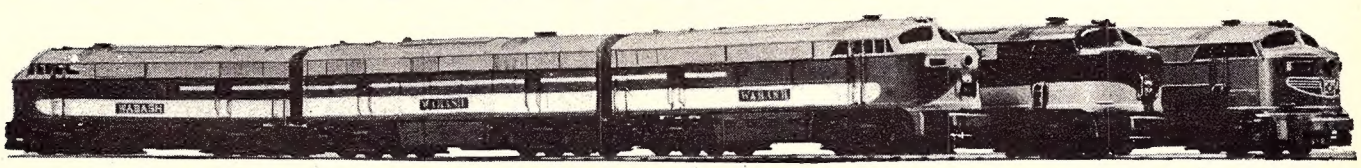

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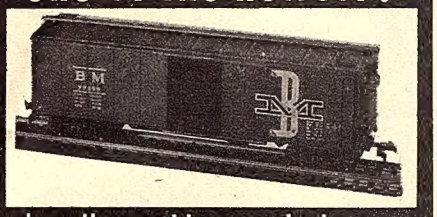

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make for better relationships with the parole board! Dave is a double-O gager, has just put up a new 55 foot long pike having 650 feet of track and 60 turnouts. The North Jersey area is still an OO stronghold with two very active clubs, the NJMRRA and ABCOOR. Ed.

We Bow Our Heads, Suh!

Washington, Fredericksburg & Potomac on page 67 of May issue. For shame!

Several Readers From Dixie

To R. F. & P. fans everywhere, our apologies. Richmond should have been substituted for Washington . . . in this case, anyway. Ed.

A House With A Railroad

When I was a youngster—that is pretty close to antiquity—the main line from Hartford to New Britain to Bristol was center third. The heavy suburban service was electric unless the snow got too deep. The through passenger service to Poughkeepsie as well as all freight was steam—but real steam.

Which is less realistic—an inconspicuous outside third rail—or a steam locomotive with no smoke or steam coming from it? Who is kidding whom?

Actually, my western division from Poughkeepsie to Danbury is powered by a GG-1, three New Haven 0350 electrics with a triple 0217 for freights. In Danbury the switcher is NH 0217. I suppose I should run them on two rail.

Many refer to the bugaboo of third rail show mounting and the cost of third rail and chairs. How about the bugaboo of a short in two rail? There is real trouble! How about a derailment because an insulated wheel has come loose and moved in or out on the axle? You're lucky if even Walther's Goo will then hold it in place.

With the tiny NMRA flanges of scale equipment, a new hobbyist—or an old one—has enough trouble keeping his train on the track. He has plenty of wiring problems if he installs sectional control and electrical interlock for his switches. In two rail the poor owner also has a complicated wiring problem at each switch—he has to watch out for any reverse loops. If he wants to signal his road, he really has a job and a lot more expense.

I admire anybody who goes into two rail with his eyes open and with real mechanical and electrical ability. I feel sorry for the poor innocents who are lured into two rail utterly unequipped for the additional insulation and wiring complications.

As nearly as possible, the CONECTICUT MIDLAND is doing real railroading the way real railroads do it. That's why we use automatic couplers (home made, by the way) which work. Our cars don't have all the valves and piping on the bottom but we do have operation. It is point to point with plenty of way stations with sidings. Every siding is used for the particular purpose shown by the buildings adjoining it. Every train does some picking up or dropping of cars enroute except for the two Clippers. Without interfering with the 400 foot mainline, you can switch cars at Elmwood or Danbury yards to your heart's content. Or you can sweat out some switching problems at the branch line terminals at Norfolk or Pittsfield.

W. Watson House
Hartford, Conn.

OK, Watty, we agree that heavy electrics do look sort of silly running at full steam, so to speak, on two rail, but we still personally prefer two rail for steam power. Let's hope more readers discover the joys of real railroading as Watty does, rather than just

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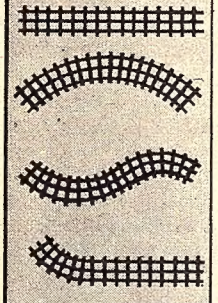

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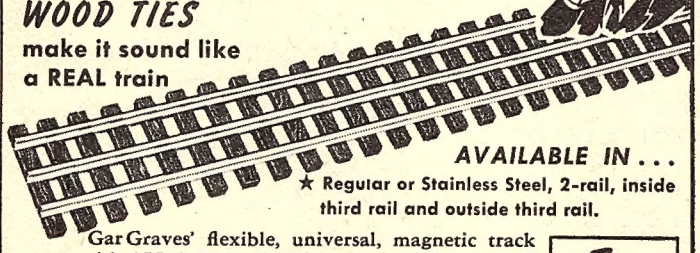

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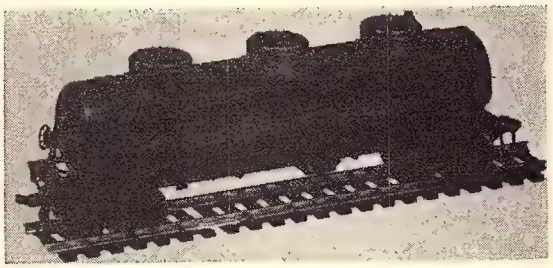

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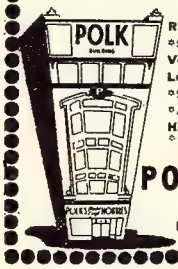

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the round and round the loop operation which quickly loses its appeal. Ed.

Very Delightful Stuff

Enclosed are two photos which might be of interest. This is a Brass Betsy which is one of three I have acquired. As you can see, I have followed the influence of the Colorado narrow gauge. The engine is patterned after the old South Park, the herald after the Rio Grande Southern, while the Red Ball cupola on the Cliff Line bobber is like that of the Midland Terminal standard gauge pike in the Colorado Cripple Creek area.

James W. Mims
Midland, Texas

This is as chunky and railroady an engine as we've seen.

Economy Controls

Those of us building layouts on limited funds run smack into the relatively high cost of double pole, double throw toggle switches. I've found ordinary knife switches to be a satisfactory substitute.

DP DT knife switches may be purchased for about 35c each. After the wiring is done underneath and brought up through holes in the ceramic base to screws on the six terminals of the switch, the switch may be screwed down on the control board.

The photo shows the standard crossed wires of the DP DT switch when used for reversing the polarity

of DC electricity. The dark wires may run to the track, the light ones to the power pack.

Robert Anderson
New York, N. Y.

Knife switches do take up somewhat more room than the toggle switches commonly used. However, they can conveniently be mounted in a row on top of the layout or wherever desired. Ed.

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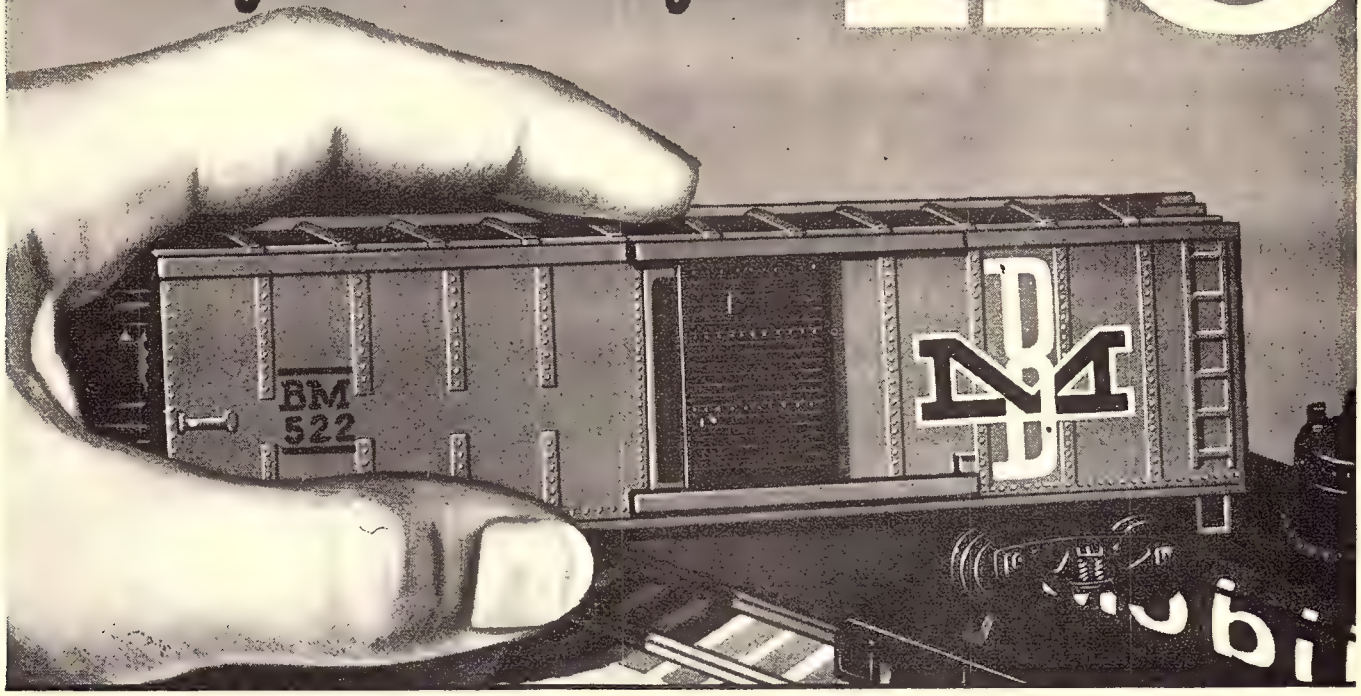

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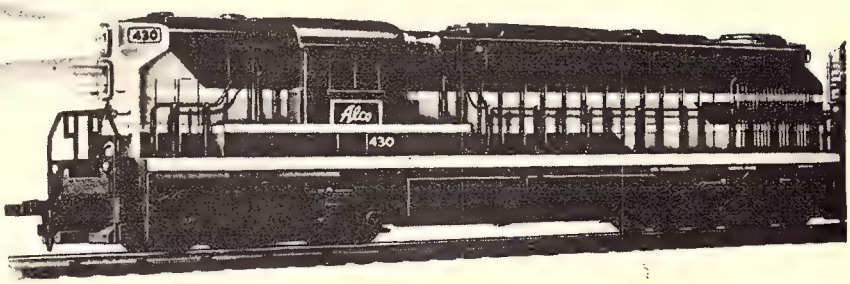

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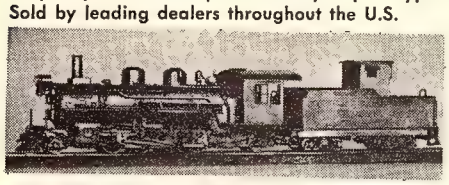

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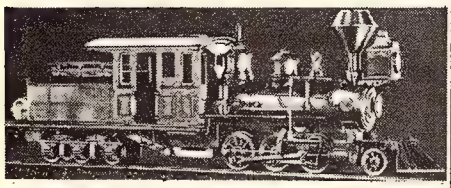

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PO Box 57
EDMONDS, WASH.

DISPATCHER'S REPORT

In The Back Shop

Schrader Specialties now working on New Haven 0400 electric loco, and perhaps at some early date, an 0360, as a companion to the GG-1. This will utilize the same chassis as the GG-1 but have an entirely different cab This one is still in the early tooling stages so don't expect them this year . . . **Pacific Fast Mail** out with a beautiful Denver & South Park On3 Mason Bogie type engine. Very limited quantities . . .

Lionel has tied up with **Rivarossi,** famed Italian train manufacturers, and will introduce five sets of HO for the 1957 season. All are freight sets: three diesel powered and two steam sets. The diesel is the Fairbanks-Morse cab unit. The switcher is the B&O 0-4-0 Saddle Tank, and the larger steam loco is a new 2-8-0 somewhat Americanized but with a distinctively European cab . . . Price range is $25 to $50, with NMRA couplers, 2-rail track . . . **Lionel's** new HO line is not their first venture in 2-rail, as they had 2-rail OO trains just prior to World War 2 . . .

Bob Peare doing a terrific job with his 36" sections of flexible track with nickel silver rail. He has No. 4 and 6 switches, too . . . New HO rotary snowplow kit with tender from **M. Dale Newton** at $10.00. This'll really clear the tracks of snow.

Complete RMC File

If you have a complete file of RAILROAD MODEL CRAFTSMAN and MODEL CRAFTSMAN dating back to 1933, won't you please drop us a line. We'd like to know of everyone who has a complete file, in connection with our 25th Anniversary Issue coming up next year.

Walthers releasing their Robin Hood beer reefer in an O gage kit, with many of the same features as their HO version. Sides are painted and silk screen lettered, a departure from Walthers usual decal lettering . . . The entire Walthers line in both HO and O is undergoing a complete overhauling. Their new signals are excellent . . .

Ambroid will release a limited run of HO car kits starting this fall. There will be only 5000 kits of any one design run off and no more. First will

In The Club Car

There are plenty of railroad songs on records but the best one we've heard is about the Santa Fe fan in L. A. who bought a record of Sousa's **El Capitan** . . . Some trains which have been honored in song include the famed Wabash Cannon Ball, and the Tennessee Central No. 9. Many hill billy singers also have railroad tunes on recording. **Roy Acuff,** for example, has some real piperoos with his Glory Bound Train, Devil's train, and Freight Train Blues. Check any record catalog. One railroad record heartily recommended is a 10 inch hi-fi disc by **Cook** called Rail Dynamics. It was recorded on a rainy night along the New York Central . . .

These Are New In HO

$4.95 plastic HO porter jeep-type diesel from **Athearn** at hobby shops soon . . . All cast metal crane kit in HO from **Stewart Products** of Rhode Island at $11.95. An eye stopper at the June New York Hobby Show, it assembles easily . . . **Wilson** HO turntable in ready-to-install form at hobby shops soon.

HI FELLOWS! LOOKIT WHAT WE GOT!

So many new and exciting interurban releases that we can't tell you all the details in one ad. Photo shows NEW P.E. 1370 Combo, NEW P.E. 950 wood coach, NEW P.E. 1200 "SanBerdoo" coach, NEW Kit 20 corrugated metal car barn (Fireproof) while in the barn you can see the noses of the P.E. 1252 coach, 1907 Niles car and S.P. Portland combo. Variety for interurban Pikes and more coming! shows NEW P.E. 1370 Combo, NEW P.E. 950 wood coach, NEW P.E. 1200 "San Berdoo" coach, NEW

E. SUYDAM & CO.

BOX 55 **DUARTE, CALIF.**

A set of three double ended dental type tools for picking, probing, lubricating, and so on, available from A. Lawrence Karp, 16 Putnam Park, Greenwich, Conn. The three tools, made in Sweden, list at $3.95 . . . **Hexacon** has a new 50 watt soldering pencil with a ¼" replaceable tip . . .

Several recent fan group conventions attracted widespread enthusiasm: the Houston **NMRA National Convention** and the Edaville **Train Collector's Association** National Meeting. The NMRA is a national group for all model railroad fans and has about 10,000 members.

HO TROLLEYS BY PENN SCALE MODELS ARE YOUR BEST TRACTION BUYS!

All kits have one-piece metal bodies and assembled power and trailer trucks, working trolley poles, powerful motors and complete prototype detail. See these smooth operating trolleys at your dealer: Old-time Brill Suburban, IRR Interurban and PCC Streamliner. Complete Catenary System (wire and poles), too.

PENNSYLVANIA SCALE MODELS
14 S. Centre St. Pottsville, Pa.

RED BALL WORK TRAIN SPECIAL

Gandy Dancer's Supply Car, 36' No. 105 ...$2.25
Scored card sides, wood backing, diecast ends and hardware.

Derrick Car, Old Time Wrecker, 36' No. 117 $3.55
Diecast sides and parts, not lettered.
A $5.80 value for $5, postpaid. Another $5 work train SPECIAL next month. Send 10c for illustrated price lists showing over 500 items. Ask for FREE copy of Red Ball News.

M. DALE NEWTON COMPANY
P. O. Box 929 Medford, Oregon

Metropolitan Rapid Transit Commission has released plans for a loop rapid transit system linking New York with New Jersey. The multi-million dollar project would place stress on a trunk rail line which would be fed by the railroads terminating in New Jersey, as well as by bus lines which must now travel into New York City to a poorly located bus terminal. . . .

. . . **Pennsylvania Railroad** has placed a K-4s Pacific on permanent exhibition at Horseshoe Curve, Altoona, Pa. . . . **New York Central** experimenting with piggy back trailers that swivel off of the flat cars. . . . **Jersey Central's** new herald makes the Statue of Liberty visible from miles away. . .

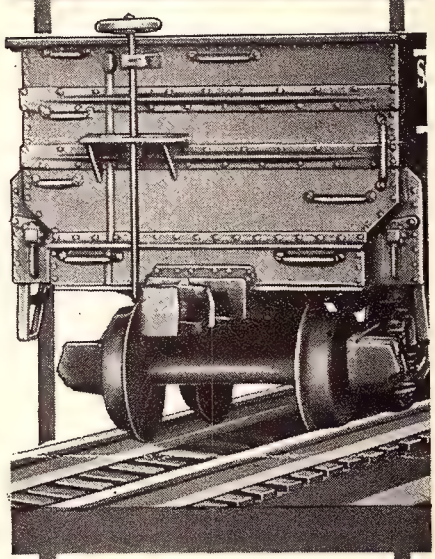
A new HO catalog from **America's Hobby Centre,** 146C West 22nd St., New York City, N. Y., has been received. The 64 pages pack in virtually everything obtainable in HO, together with hundreds of illustrations. The catalog segregates locomotives, cars, and all types of accessories, making comparisons and a choice between different brands easy. Of especial value are the separate parts listings, listing many hard to get items. At 25c, a worthwhile investment. . . .

NEW RMC SCHEDULE

A glance at almost any newsstand during the summer months would indicate that something was amiss: many stands had only a fraction of the publications they normally carried. This chaotic condition came about as a result of the decision by American News Company to give up nationwide distribution of magazines. After due deliberation, it was decided that suspension of the July, August, and September issues would be prudent in view of the fact that the bulk of RMC's sales are through newsstands. It would not be fair to advertisers to give them only a fraction of the circulation for which they normally pay. Neither would it be sound economically to the publisher.

Effective with this issue, RAILROAD MODEL CRAFTSMAN will go on sale everywhere on or about the 15th of the month preceding date of issue. The November issue goes on sale October 15th.

"DETAIL ENGINEERING" by ULRICH...



...TRUE REALISM AT NO EXTRA COST

No taste for HO detail the old, tedious way? Then you're a budding ULRICH fan. You'll have true all-metal authenticity, and the fun of clever assembly, but none of the tiresome labor of ordinary kits. See your favorite dealer.

Send 10c for catalog

ULRICH *Model kits*

PRECISION HO TOYS FOR MEN
4233-X Babcock, North Hollywood, Calif.

B & M Blue Box Car

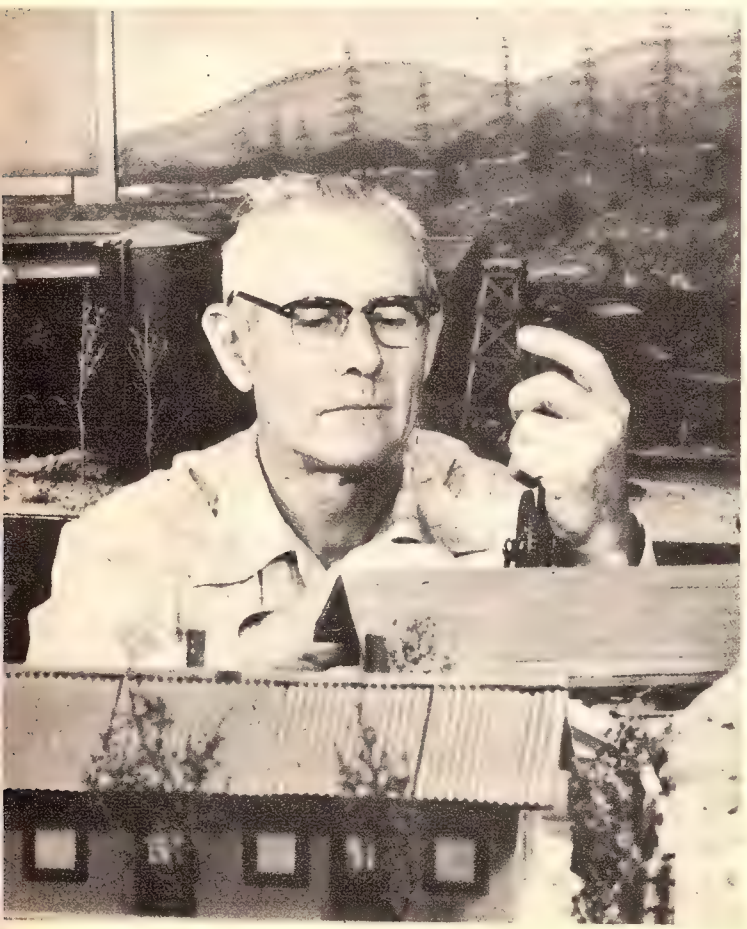
One of the most colorful-certainly the bluest car on HO rails. Other features of this outstanding car are superb detail, rail-holding performance, free-swinging TYCO trucks with MANTUA automatic couplers.

Complete Kit No. 311 G $2.45

MANTUA
FIRST IN HO

SEE THIS MILES-AHEAD MANTUA KIT AT YOUR DEALER'S TODAY

SIERRA NORTHWESTERN LINES



AL MOREY'S Sierra North Western Railroad is today one of the oldest scale model pikes still in operation, dating back to 1930. That explains pretty well why this O gage pike has retained outside third rail as its source of pickup. Outside third rail also has simplified the wiring required.

The layout spreads itself out in a room 17x35 feet in size and has the familiar figure 8 as its basic track design. Despite its large size the track layout has been kept relatively simple, providing good operation with a minimum of time consuming maintenance.

All locomotives on the line were either built from scratch or are converted from kits. The photo of the International Atlantic elsewhere on these pages illustrates how Al can take even an economical kit and end up with a super-detailed smooth-running hog.

Much of the scenery has been completed and has been deliberately kept simple, in duplication of typical sparse California countryside with its light sand colors and low lying shrubs.

Motive power on the line is still 100% steam powered, with a Mikado the heaviest engine on the line. And on a road where even the brass hats get a kick out of running Mikes on passenger, we feel that steam will be around for quite a while.

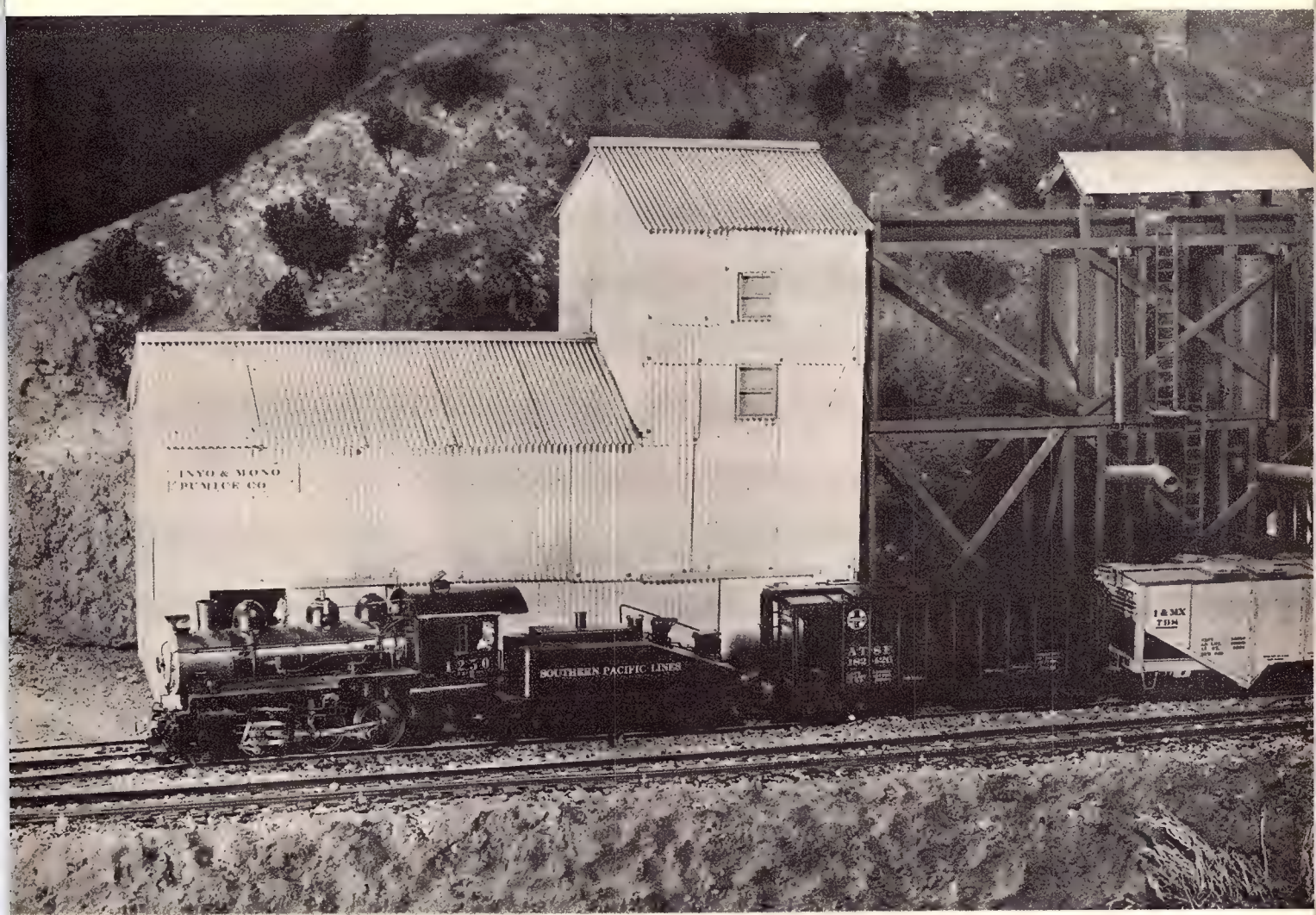
▶ Lobaugh 0-6-0 with Espee markings dropping off two empty covered hoppers at the Inyo and Mono Pumice Co. plant. Note how high hills add greatly to the apparent depth of layout, with Western appeal.

▲ Clean and trim is this chunky 2-8-0 running down the main with the way freight. 17 x 35 foot layout is plenty big, even in O gage.

◀ Pacific No. 809, an All-Nation job with plenty of extra detail, takes a ride on the turntable. Outside third rail used by Al Morey is unobtrusive, and makes wiring simpler. Ironically, no electric locos are on the roster. All the locos are silenced, and make little noise.

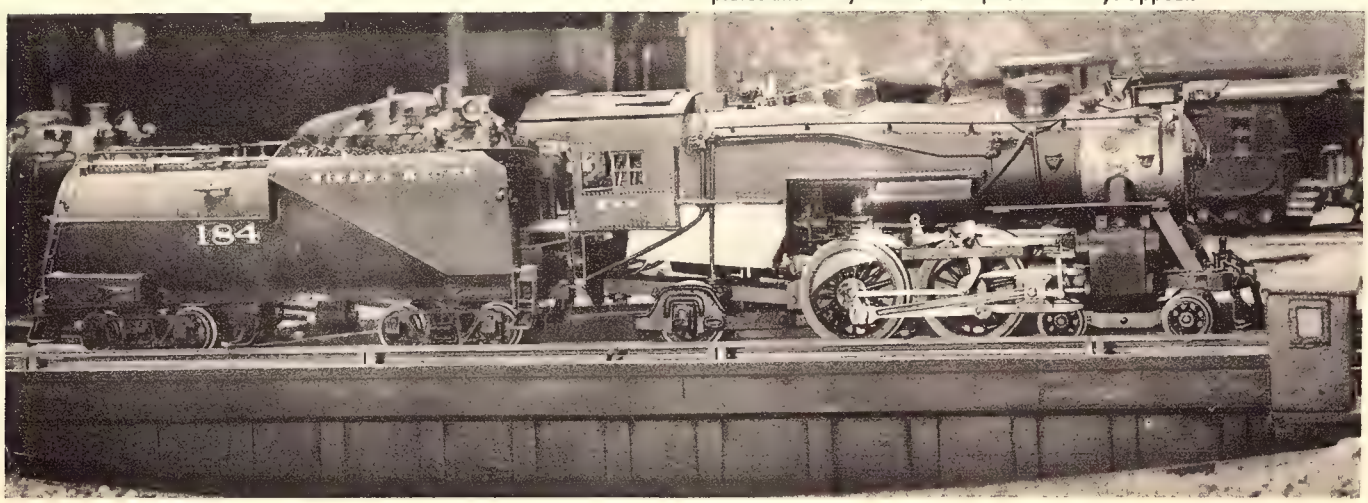
built by Al Morey

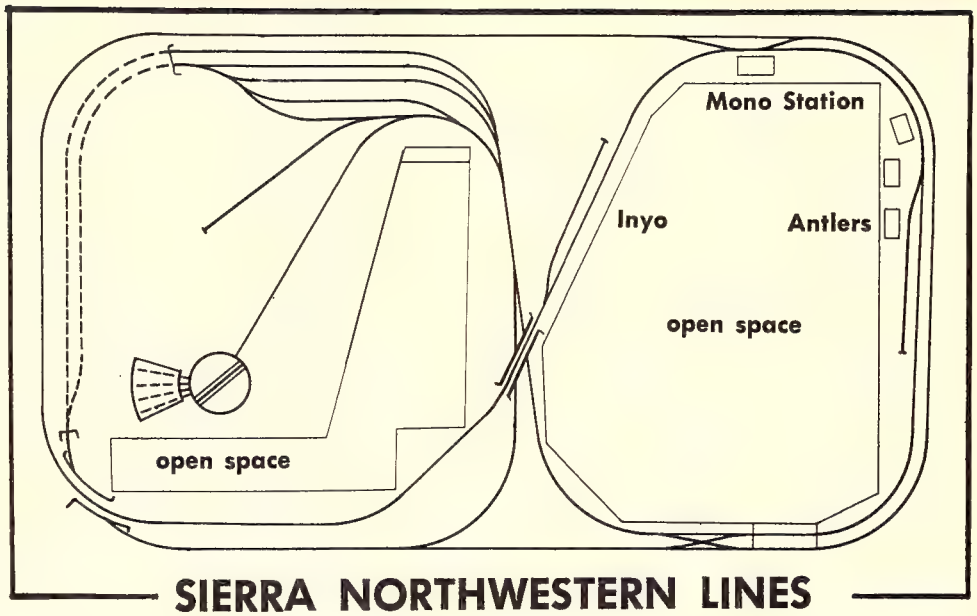
photos by Sharpe Delaney



▲ Overpass on the Sierra Route is point where the layout's figure 8 crosses over itself. The structure in foreground is icing platform which services the road's refrigerator cars. Note the plastic ice cakes.

▼ Super detailed Atlantic was a low cost International kit, given the full back shop treatment. Plenty of lost wax castings plus builders plates and many other details pack it with eye appeal.





SIERRA NORTHWESTERN LINES

▼ Overall view of engine terminal at east end of layout has roundhouse, turntable, plus such other facilities as are required to service the road's equipment. Note how scenery blends with the background.

FAIRMOUNT WEED SPRAYER

In the old days, hot cinders did a fair job of keeping down weeds, but today's roads need modern self propelled weed sprayer cars to keep the right of way clear. This HO model is built around a Teaspoon Of Power motor unit, and has a brass superstructure.

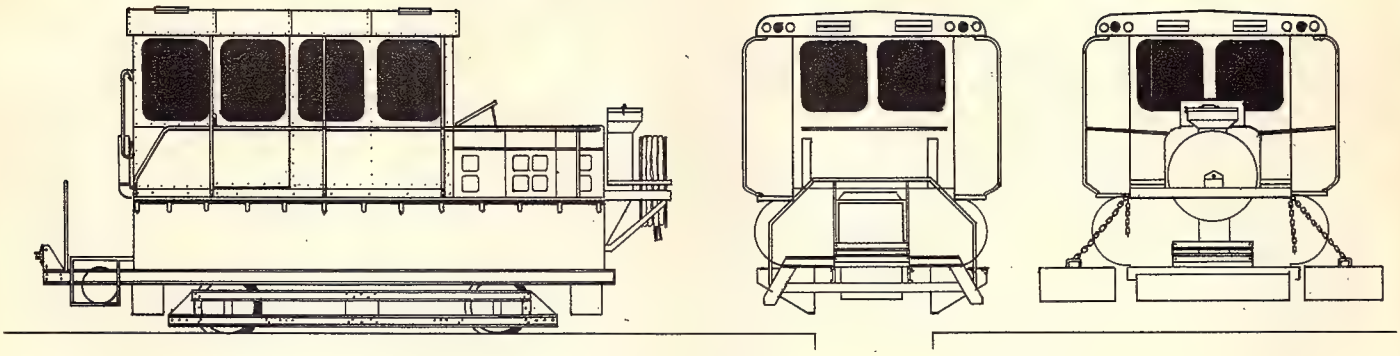
by John Kemp

PERHAPS a better title for the article would be "The model that was three year a-building", but that would be misleading. I **started** the model upon receipt and study of plans in 1954, but then it lay around in a half finished state until 1957 when I finally finished it up. The model, as you may surmise from the photos and plans, is a self-propelled weed-sprayer car built by the Fairmount Railway Motors, an organization famous for railway motor cars (for section gangs, etc.) and maintenance of way equipment. The self propulsion of any small model is always of interest to me and this one was no exception.

Power is furnished by a Kemtron "Teaspoon of Power" motor truck with its wheelbase extended to the prototype 10'10" as shown in the photo. An angle of brass is screwed or press fitted (over the extended bearing) to the ungeared end of the motor truck, and the set of wheels, running in a brass tubing bearing, affixed to the outer end of this extension with solder.

The superstructure of the car is quite complicated for a little power unit, as evidenced by the prototype photos. I simplified this quite a bit for the model plans, and then simplified some more when building my model. I went to the extent of making a drawing and having a set of major parts photo-engraved, but I made several errors in this and am not making them available to others for that reason and also because it is not much more trouble to mark the parts out carefully on sheet brass that has been colored with Rossmoyne or other layout dye.

Once the power truck has been prepared, begin work on the tank. This is a scale 32" in "diameter", or height, 9'-1½" in width, and 19'-9" in length. I made the tank from two lengths of ⅜" diameter brass tubing spaced and united by correctly measured oval ends soldered in place. Above this was soldered a deck which you should make of Kemtron diamond pattern etched brass, although the prototype actually has the open-work diamond design used quite frequently on roof-walks on box cars. For convenience, the location of the cab may be marked on top. The opening for the upper part of the Teaspoon of Power should be



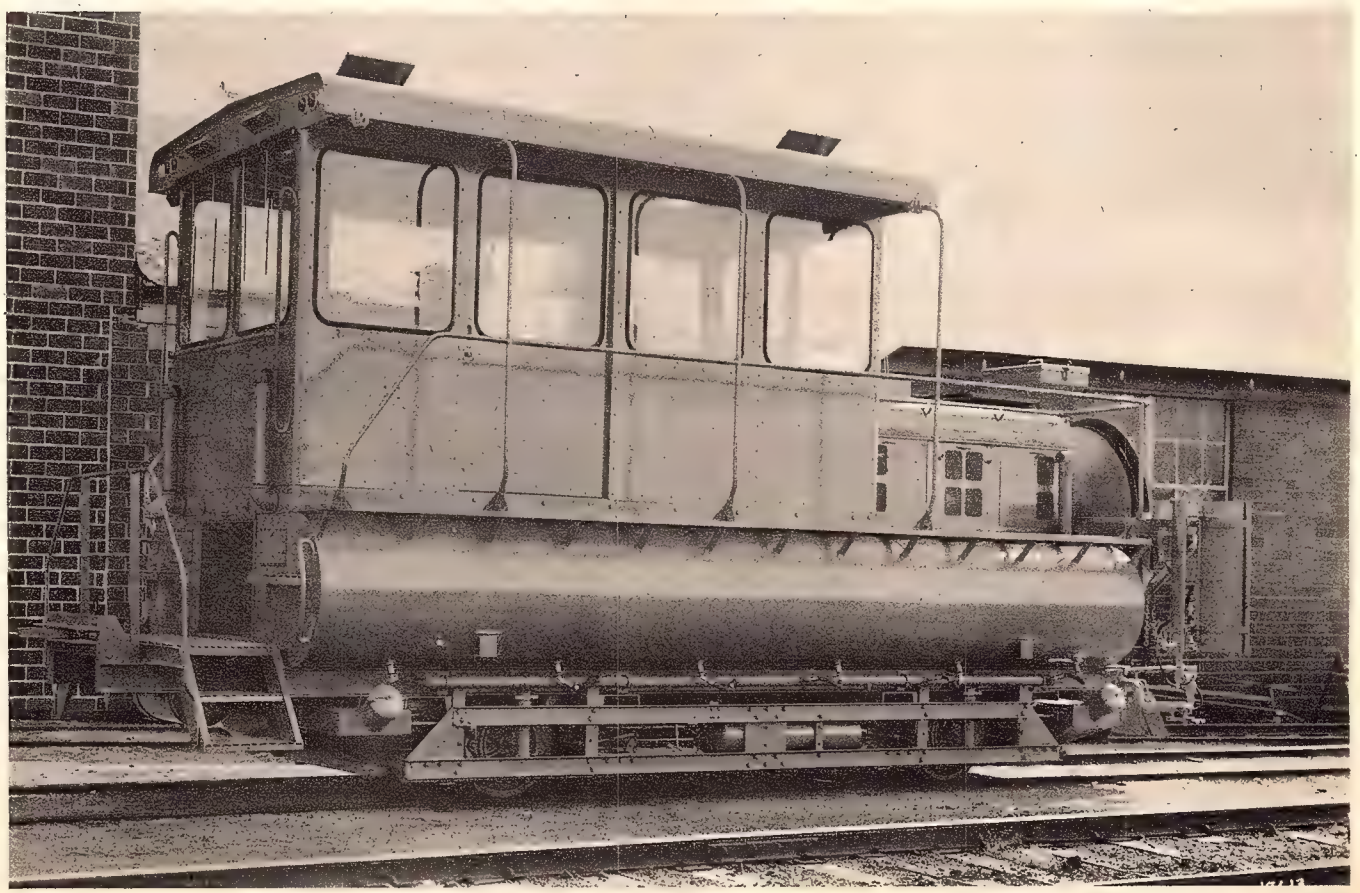
marked out and then cut out with a jewelers' saw. Parts of the pieces of tubing at the sides of the tank will be cut away inside where they won't show. Better to make the opening too big (as long as it will be inside the cab) than too small. A piece of heavy gage brass is drilled No. 42 to take the 2-56 x ⅛" screw used to attach the motor truck, then shaped to fit snugly against the motor truck, and finally soldered in place to the top of bottom of the deck. Bend as required to make the tank level. Test the unit out on track. I found out at the end of the job that the complete car, even with a metal superstructure, is not heavy enough to provide good pick-up of current, and so I recommend that at this point you fill the pieces of tubing forming the sides of the tank with lead, especially near the motor truck. I folded up some pieces of non-flowing wire solder and wedged them in the space. I also put more weight inside the cab.

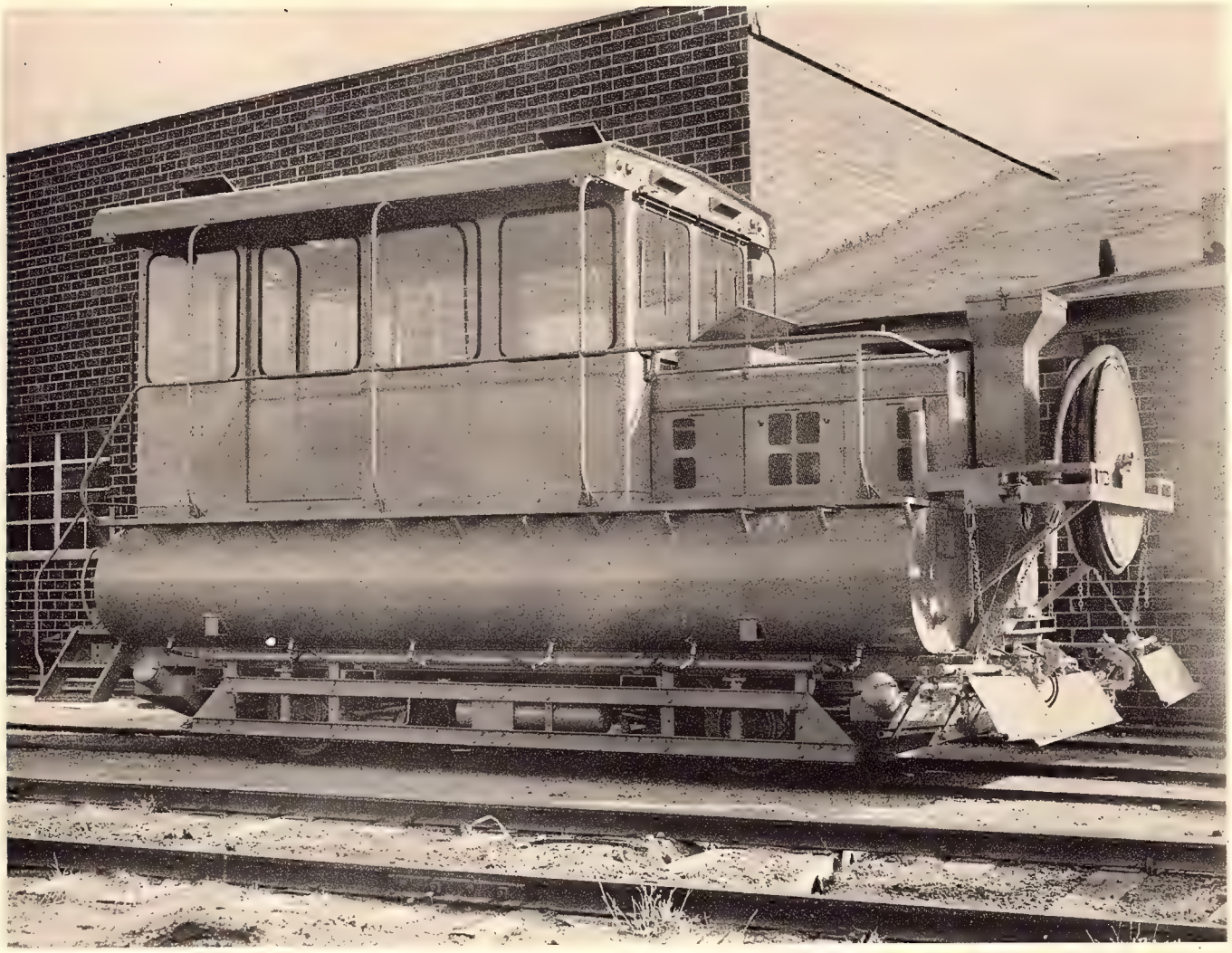
Next comes the side frames. As I said I had these along with the rest of the body photo engraved, but believe I could have done just as well using regular sheet brass, about .020" or .015" thick. In either case the interstices are cut out with a jewelers saw after drilling one small hole in each. The side frames are soldered to the bottom of the tank. End pieces are soldered to them, and the front platform and steps built up.

Next mark out and cut out the cab from sheet brass and solder it to the deck. The cab is 6'4" wide, 13'0" long, and 6'6" high. However since the eaves are indicated on the front and back parts of the body, consider the overall height 7'5" and the overall width 9'2". The cab is actually made in four pieces. One is the front, with the front windows on each side attached. The

LEFT — Plenty of detail can be packed into this Fairmount weed-sprayer as this official photo shows. The spray shields are in the down position. The Teaspoon Of Power motor unit fits snugly.

BELOW — Modern design of the unit helps to keep construction simple. Author's model use photoengravings but sheet brass would do just as well. The prototype is gasoline propelled; it can do 35 mph.





In spite of sideframes on prototype, unit has inside journals like on a motor car. The cab is located at the front end of this car. The unit has two gasoline motors: one is for propulsion, second is for spraying. Recommended color for the model would be bright orange.

other is the back with the two back windows on each side included. The other two are the doors which are soldered between these, but recessed the depth of the brass. Notice that the windows have rounded corners. In actuality the panes are flush with the sides, but I had to recess them the depth of the brass in the normal method of installing "glass" on models. Solder the cab together and in place on the deck.

The hood at the rear conceals two gasoline motors, one for pressure in the tank, the other for transfer of liquid. (The propulsion motor is concealed in the floor of the cab between wings of the tank, as indicated by location of the radiator at the front of the tank). I built the hood up from various layers of brass soldered and screwed together, then shaped with a file. It is attached to the floor with a flat-head machine screw sunk into its top. Note hatchway and platform soldered to top of hood.

Just behind the hood is a filler stack for use where there are still steam loco water spouts or tanks. After forming mine up from sheet brass and soldering it in place, I can recommend heartily filing it out of solid stock and screwing it in place! Behind this is a reel used for a filler hose where there are no water spouts.

At about this stage it is necessary to paint the superstructure so that you can cement in the window glass before soldering on the roof. The glass, really clear plastic hazed up somewhat with fine sandpaper, should also be wedged in as well as possible with pieces of sheet lead or strip-wood. The top edges of the front and back of cab should be filed clean, then tinned with solder and a roof of thin (.005") shim brass shaped and soldered on. This can be trimmed after soldering on. I cheated on the roof ventilators and put on just one, which "happens" to be over the motor truck mounting screw, with a piece of oversize tubing running down to it. Inside this, as a sort of lid, is a rectangle of brass for a lid soldered to the next smaller diameter of tubing. Thus, I can pull out the lid, reach down with the screwdriver, and unscrew the motor truck for adjustment.

There are the posts on each side of the cab, soldered to roof and deck, and one post at the rear of each side. The handrails are square-J shaped so that after being soldered to the aforementioned rear post they come back to the rear of the cab and enter holes there. Solder them in place to one post at a time, after pre-shaping, THEN bend down the front ends as shown on the plan and photos and solder to the front corners of the deck. Also add the railing to the front platform.

The pipes on each side, under the tank I indicated simply by long square U's of wire thrust into holes in the tanks. The quite elaborate sprayer heads and guards I indicated simply by folding pieces of sheet brass of approximately the right size to the inverted V shape, then soldering a piece of wire along the top. To minimize breakage and interference with nearby tracks, I modelled them in the raised or travelling position.

Looking over the manufacturers specifications, I find the following items of interest which I have not mentioned above. Has two double airhorns. Has at each end two headlights and two red, two green, and two white marker lights. Running speed while spraying 23 to 27 mph; deadhead, 35 mph. Overall dimensions 24'9" long, 10'2½" wide with wings raised, and height 13'0". Wheel diameter not given, but presumbably the 22" diameter of the Teaspoon of Power wheels would not be out of the way.

Two-Car Motor Train—1925

Full Size HO Gage

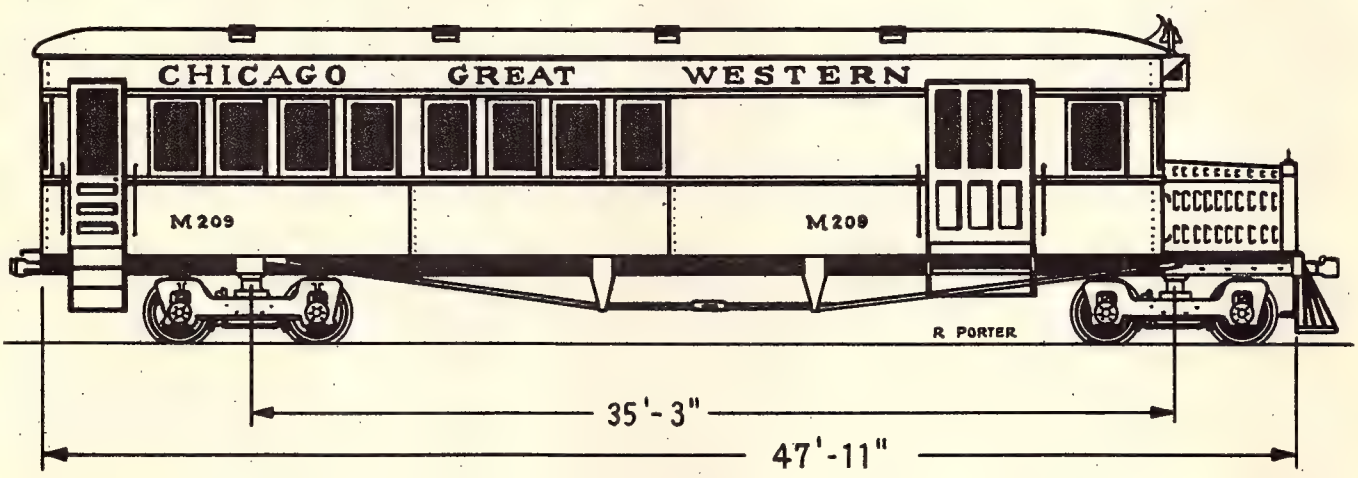
Drawn By Russ Porter

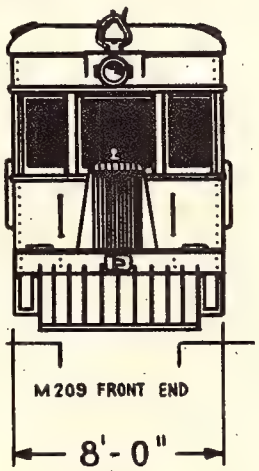
IN January of 1925, the Sykes Company delivered to the Chicago Great Western RR a two car motor train capable of traveling 50 mph. on straight track and able to negotiate a 1% grade at 25 mph. The motor unit No. 209 had a seating capacity for 30 passengers; the trailer car No 210 had a seating capacity of 52 passengers.

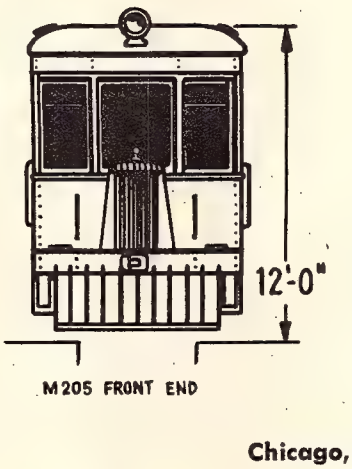
The motive power for this train was a Sterling six-cylinder gasoline motor, which developed 180 hp. at 1250 rpm and 245 hp. at 1750 rpm. The train was constructed for safe handling on curves of 200 ft. radius. A special feature, unique for the early 20s, was the mounting of the engine with its entire equipment of electrical units, etc., so that it could be removed in an hour's time and in the case of a breakdown, a new motor was substituted without delay.

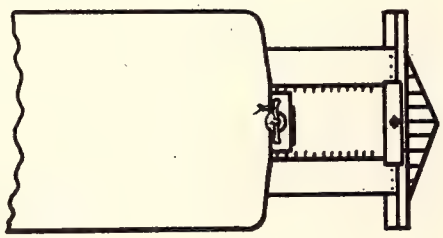
Four wheel trucks were used with specially designed side frames. A semi-elliptic spring placed under the bolster, swinging in a suspended cradle allowed sufficient side play to insure easy riding.

This train was quite similar to the Sykes built two-car unit placed in service in the latter part of 1923 for the same railroad. That unit No. 205 with trailer No. 206 had a seating capacity of 74 passengers. Refer to M205 FRONT END view on plan for comparison with the 1925 model M209. By lengthening the hood a foot and moving the front truck bolster back a foot the M209 can easily be made into the M205. Windows on the sides of both trains were the same height so by using the plans for the M209 and MT210 and keeping the minor changes mentioned in mind, two birds can be killed with one—plan.

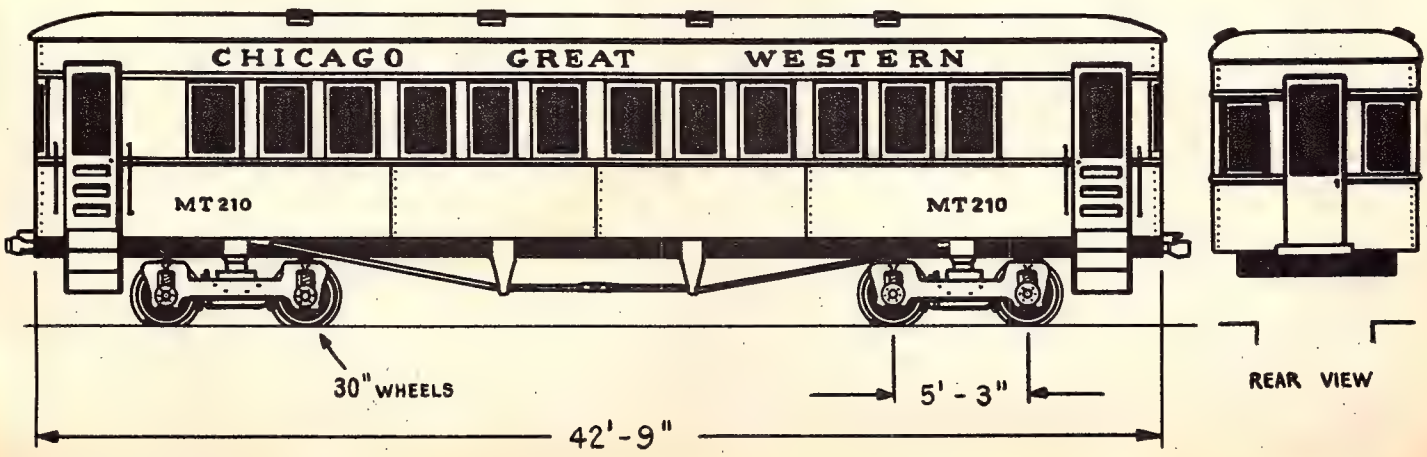








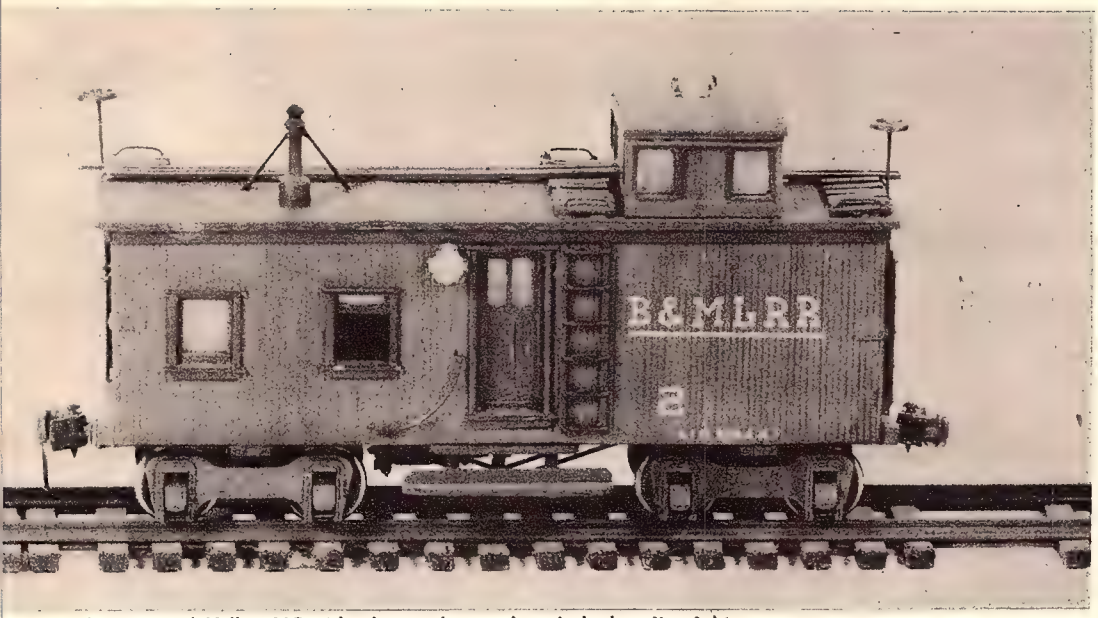
Chicago, Great Western Railroad Nos. M-209, MT-210



Len Beck, Victoria, Australia, sends in this photo of a display in O gage by the Victorian Railways down under. Although the passenger cars and locomotive are definitely American in styling, the freight cars are of European origin. Victorian Railways paints their diesels in identical styling as used by Erie Railroad, World War 2 influence.

ALONG THE BOOMER TRAIL

Southwestern Pacific RDC-3 pulls out of San Pablo Station on its trip to Meiner's Oaks. The main line spirals around walls on a 1% grade from a 3 x 10 foot yard to a reversing loop at end of line. Code 70 rail is used. Note how it eliminates the overpowering look of the usual Code 100 track. All trackwork and rolling stock on the SWP are by Paul Dieges. Scenery and structures by Jon Dieges, built when age 12!

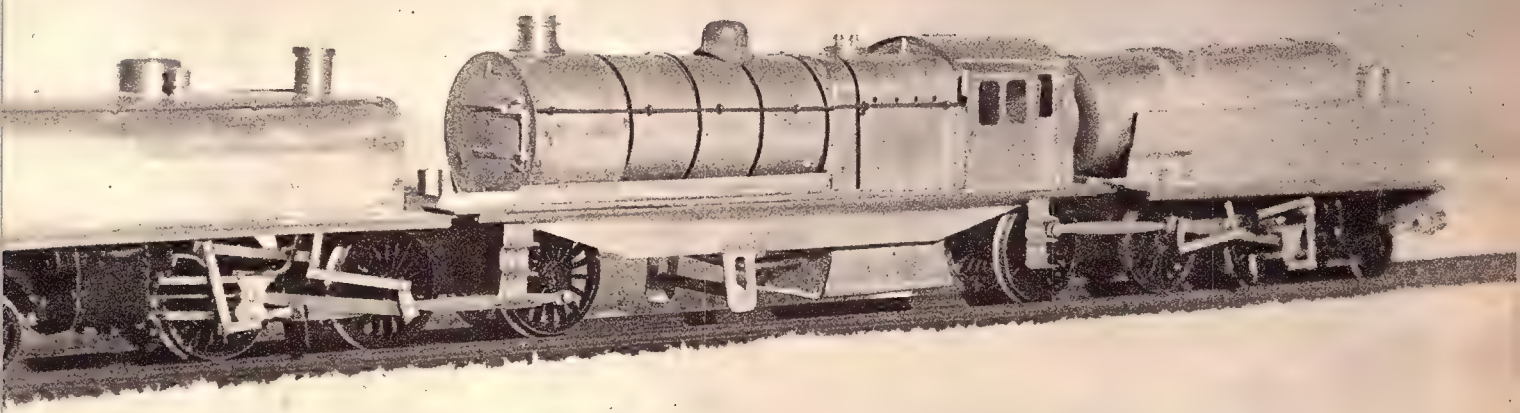


That Central Valley HO side door caboose doesn't look quite right, does it? And you're right. Builder A. Darrow Latham Jr. sent it through his shops, shortened it to suit his own needs and then substituted distinctive Fox type trucks. The result is a very happy one.

Latham photos by John Simpkins, Great Neck, L. I.

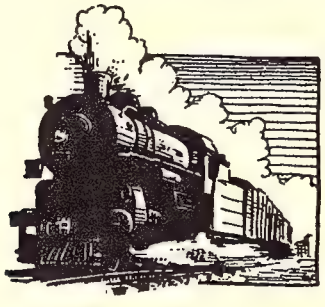
A. Darrow Latham Jr. keeps picking on Central Valley. Here's another CV reefer, again shortened about four feet in length. Note how he has patched the old weathered sides with new boards. A toothbrush and Bon Ami mixed with a bit of black dry color makes a good weathering medium. New boards are inserted later, or kept clean with scotch tape applied to a few boards before the weathering-brushing is started.

Here's a Beyer-Garrett, custom built in HO gage, and owned by Nick Grossman, of New York, whose main interest is in foreign type trains.

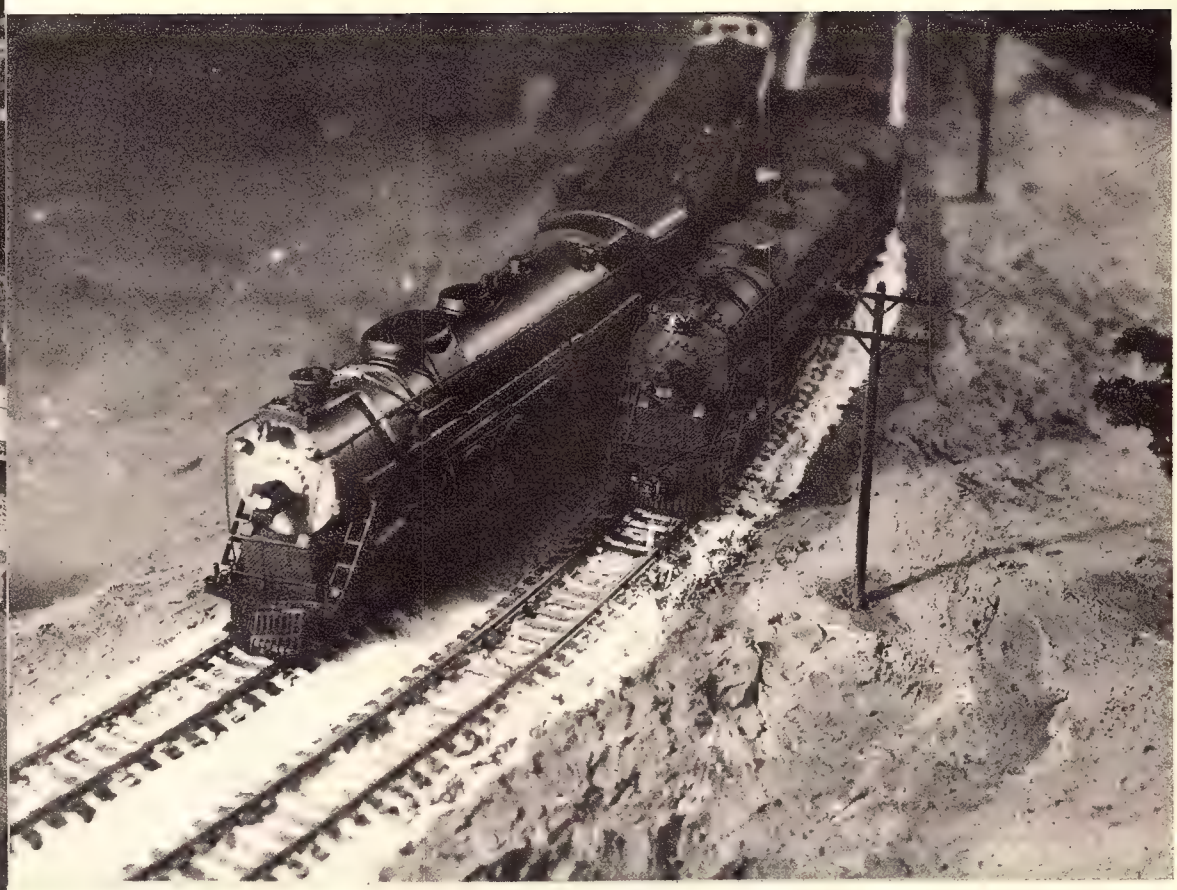


Two Aerotrains pass each other at the Menlo Park Station on the West Bay Model Railroad Club layout in Menlo Park, California. Station is exact replica of Espee Station in Menlo Park. Aerotrains have been fitted with Kemtron Aerotrain superdetail parts, MHP diaphragms, stainless steel handrails, and working Mars lights. Microwave reflectors on tower behind station were made from pingpong balls.

photo from F. A. Cribbins, Menlo Park, Cal.

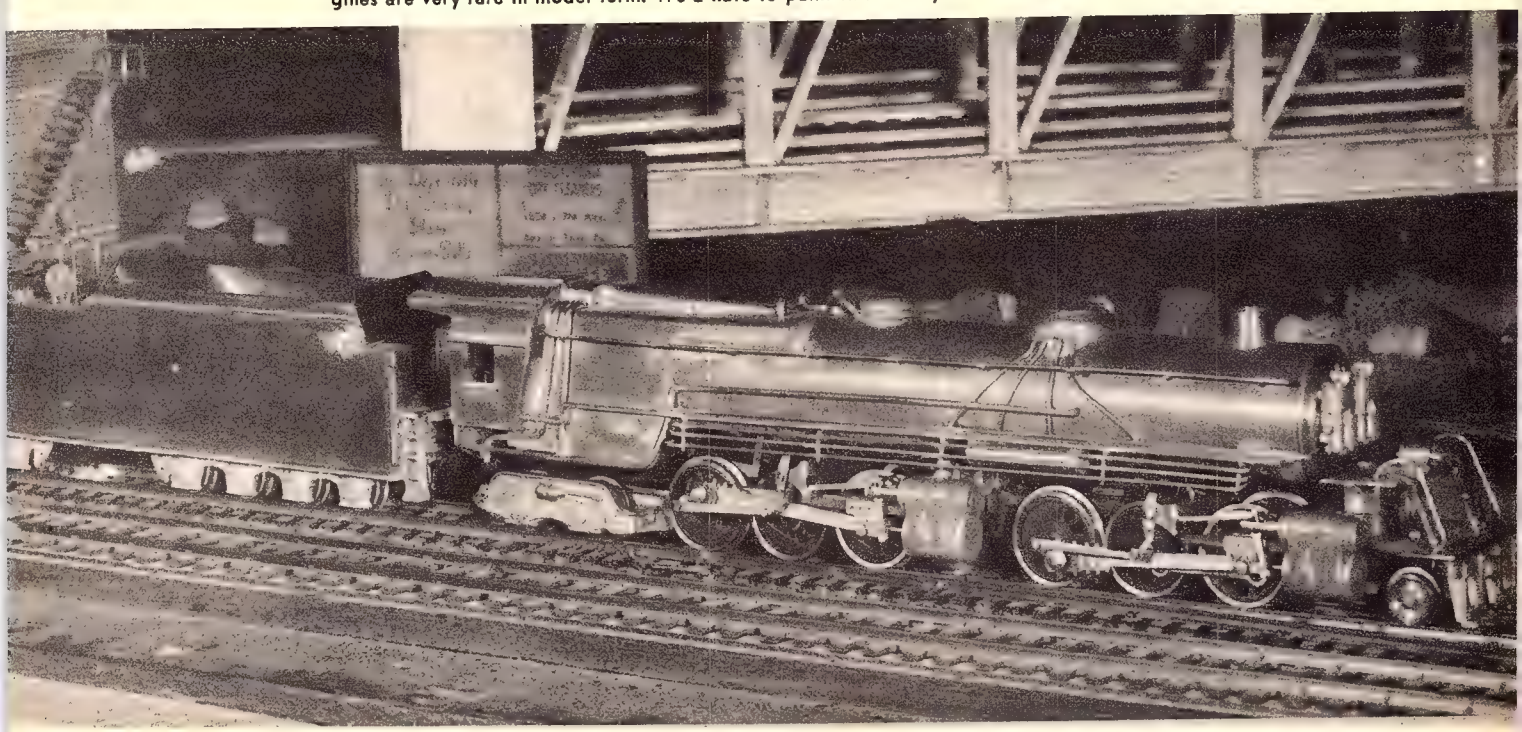


We pay $5 for readers' photos used in this section. Send size 4x5 or larger prints to: Editor, Railroad Model Craftsman, Ramsey, New Jersey.



Two Varney Northerns roaring down the main line. Sleek 4-8-4 at left with grey smokebox was built by Al Kamm, Blue Island, Illinois, and has sprung drivers. All black engine at right is Std. Varney engine built by Bill Starr, also of Blue Island. This kit is out of production although diligent searching may turn one up somewhere.

Giant Pittsburgh & West Virginia 2-6-6-4, custom built in HO gage by Joe Dorazio, has Belpaire firebox, all brass construction. P&WV engines are very rare in model form. We'd hate to paint this beauty.



plans to build from The O Gager

by Tim Plate

FOR some time we have been conscious of the fact that the transposition of prototype blueprints of rolling stock for model use creates a problem. For appearance sake, and probably on the premise that the average modeler doesn't do much scratch building anyway, the temptation is usually to make the car or locomotive drawing as pretty as possible so as to show every rivet, handrail, and other tiny part.

For the real craftsman modeler, this is fine. The old timers can follow such a drawing with ease. In fact the old timers can come up with excellent models from the meagerest of notes, a photo, or a sketch. But all of this leaves the newer modeler out in the cold. He finds it difficult to build a model from these admittedly fine drawings. The maze of fine lines, rivets, and other details, all seem to blend into a maze from which there is no starting point.

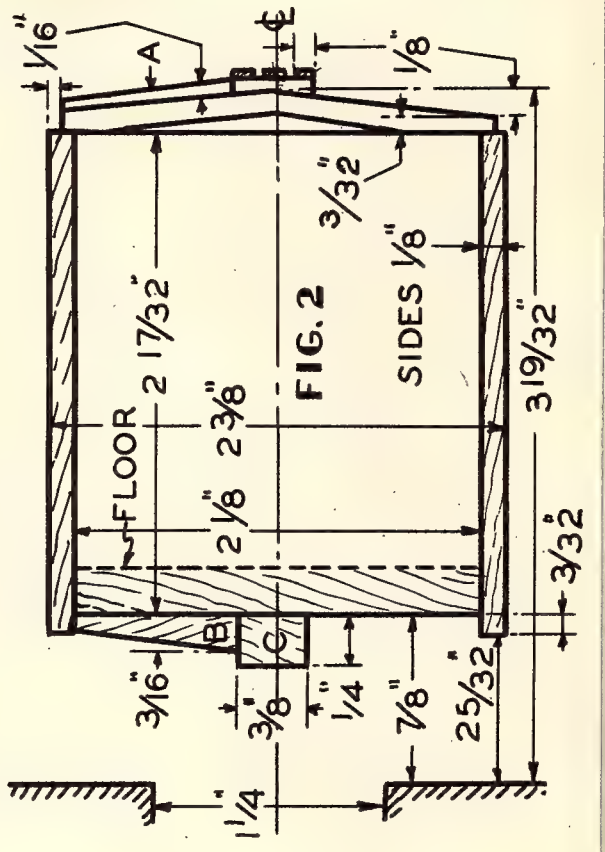
As a result, we have selected a series of freight car drawings covering most of the popular types of freight cars and present the first of these here this month: a 40 ft. automobile car of standard design. The drawing is shown full size for O gage.

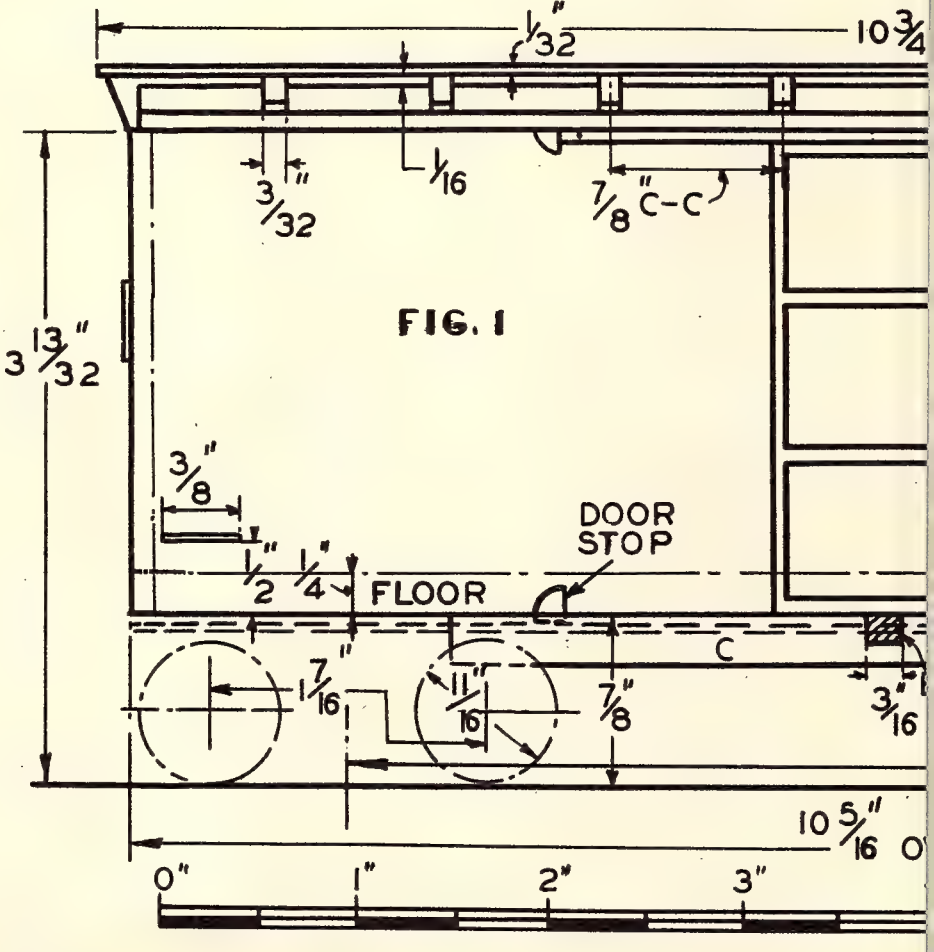
Your hobby dealer can supply you with virtually everything you'll need to build the car: wooden floor and end sections, roof, wood detail strips, trucks, bolsters, brake equipment, end sills, Ajax brake wheel, side and end ladders, grab irons, steps, couplers, paint, decals, and door slides. Doors can be made of wood or can be bought as metal castings.

The standard construction procedure is to start with the body construction, and then go into the end, roof, underbody, and side detail. For specific help, refer to the Basic Box Car body series by Jim Corrick which started in the Jan. 1957 issue.

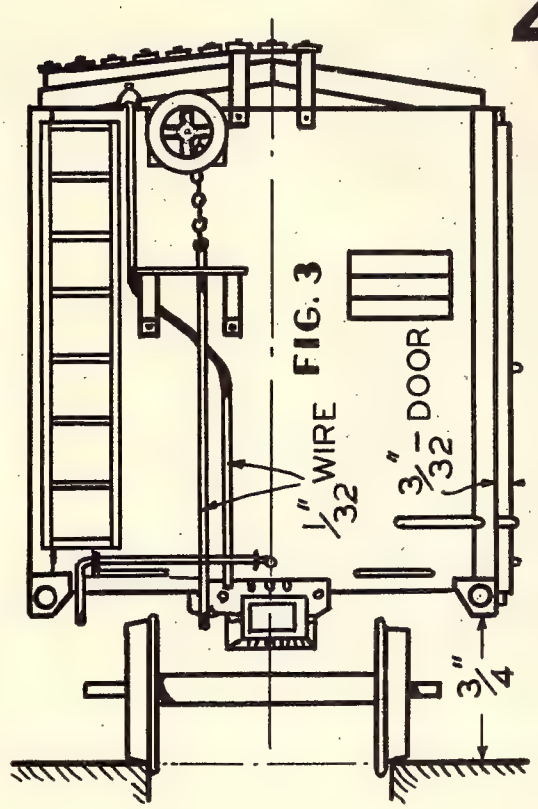
All dimensions given are for O gage. Disregard these if you are working in other gages and take your dimensions directly from the plan. In HO and TT gage, it is generally accepted to use slightly heavier fittings if necessary. The slight accenting of details makes them more readily visible.

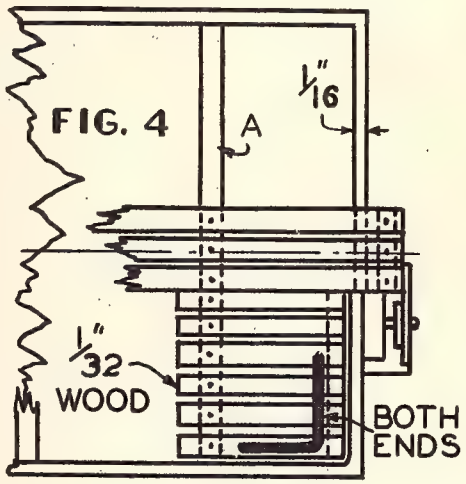
Bettendorf or Andrews type trucks are appropriate for this car. Paint color can be either tuscan or boxcar red. Cars of this type can be found in operation on most of the larger railroads. Both of the large decal manufacturers supply lettering instructions for their product, either packed in the decal envelope, or available separately in book form.



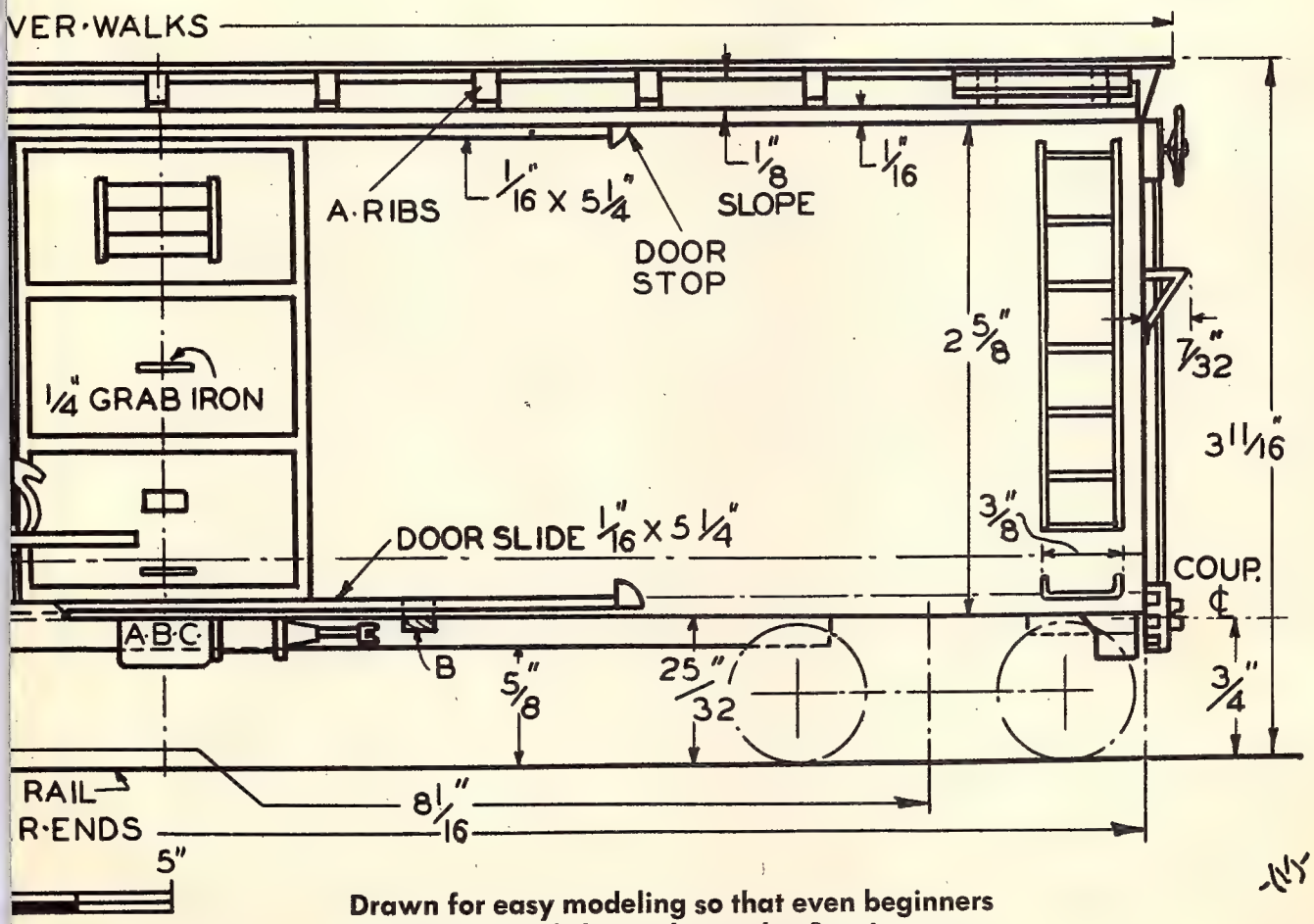


40 Ft. Auto Car





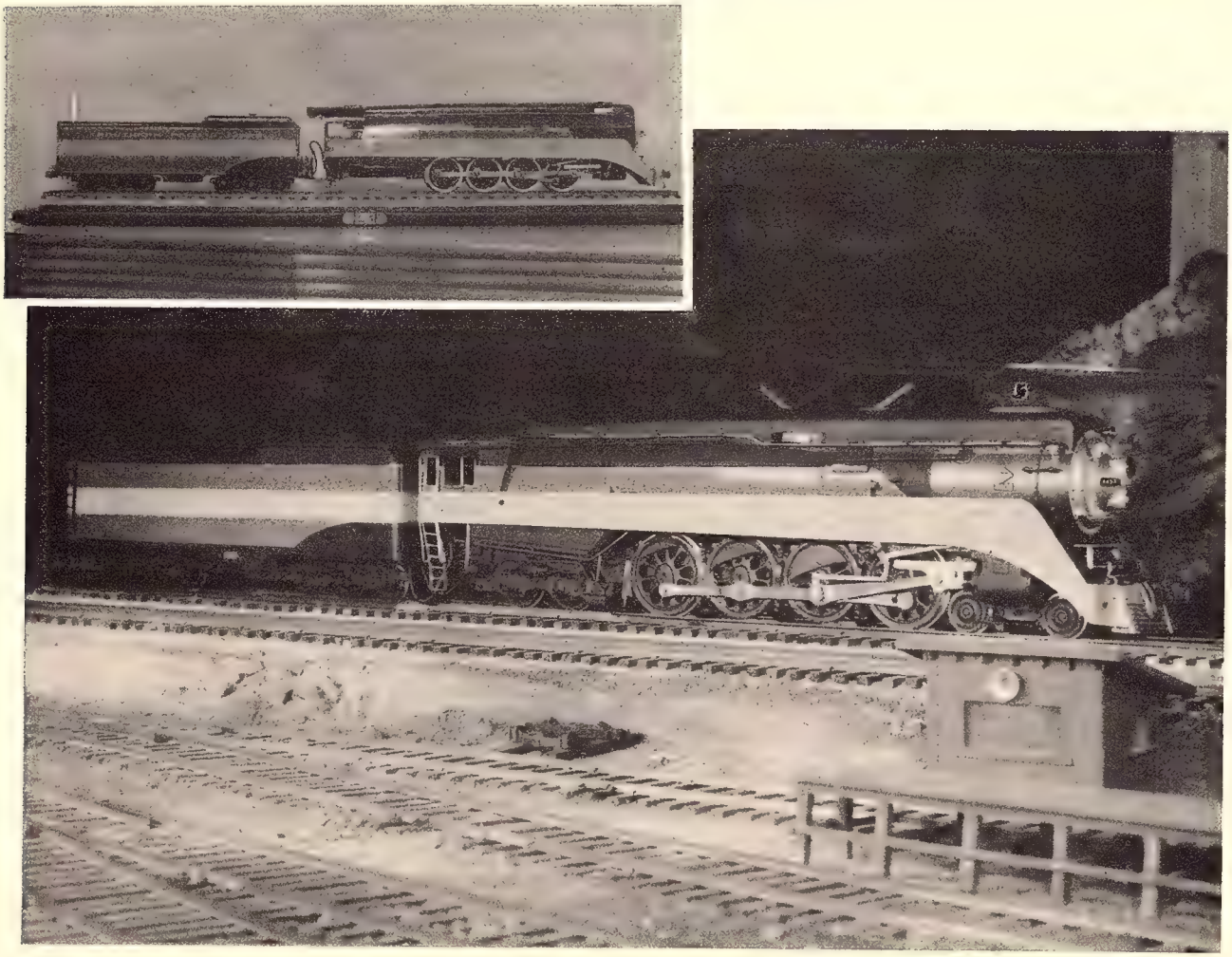
(BRAKE WHEEL ONE END ONLY)



Drawn for easy modeling so that even beginners can understand them, this is the first in a new series of craftsman plans of rolling stock.

Craftsmanship in O gage, this GS-4 4-8-4 was built in 1939 by Fred Icken as a GS-1, converted recently to more modern GS-4 by Graff.

The rebuilt locomotive, below, on the tracks of the author's Central Pacific Railroad of California, Layout No. 2. Note heft of rodwork as compared with original GS-1 loco in small photo.



An Icken Espee GS-1 gets modernized

by Ulrich B. Graff

THE photographs show a rebuild of an Icken locomotive I did for the Southern Pacific a couple of years ago. Publishing these photographs now brings about a bit of nostalgia, since these beauties of the rails will never again head a "Daylight."

For our younger generation who may never have seen a steam locomotive, these engines put out a husky 5,500 horsepower at 55 mph. In my book if you tied four of them together like a growler, that would total 22,000 horsepower! As with diesels, these locomotives were oil burners —only they burned Bunker C.

The most crowning injustice I ever heard one of these locomotives suffer was when a disembarking mother told her young son as they passed the locomotive "to look at the pretty diesel streamliner which had pulled their train."

This model locomotive was one of several GS-1 types which the Southern Pacific had built for them by Fred Icken. All were for service in the Southern Pacific exhibit during the Golden Gate International Exposition in San Francisco during 1939-1941. A marvelous testimonial to the work of Mr. Icken is that after disassembly, with the locomotive having run continuously for two years, they showed practically no wear. The locomotive which I picked to rebuild from a GS-1 to a GS-4 had been in storage for so long that when I placed it on my railroad and tried to run it it absolutely refused to budge. A few drops of oil fixed things up in a hurry however.

A check of drawings for both locomotives showed that quite an accurate rebuild could be made. However, new rods would be required, and obviously a new cab, smokebox cover, and extensive work on the tender.

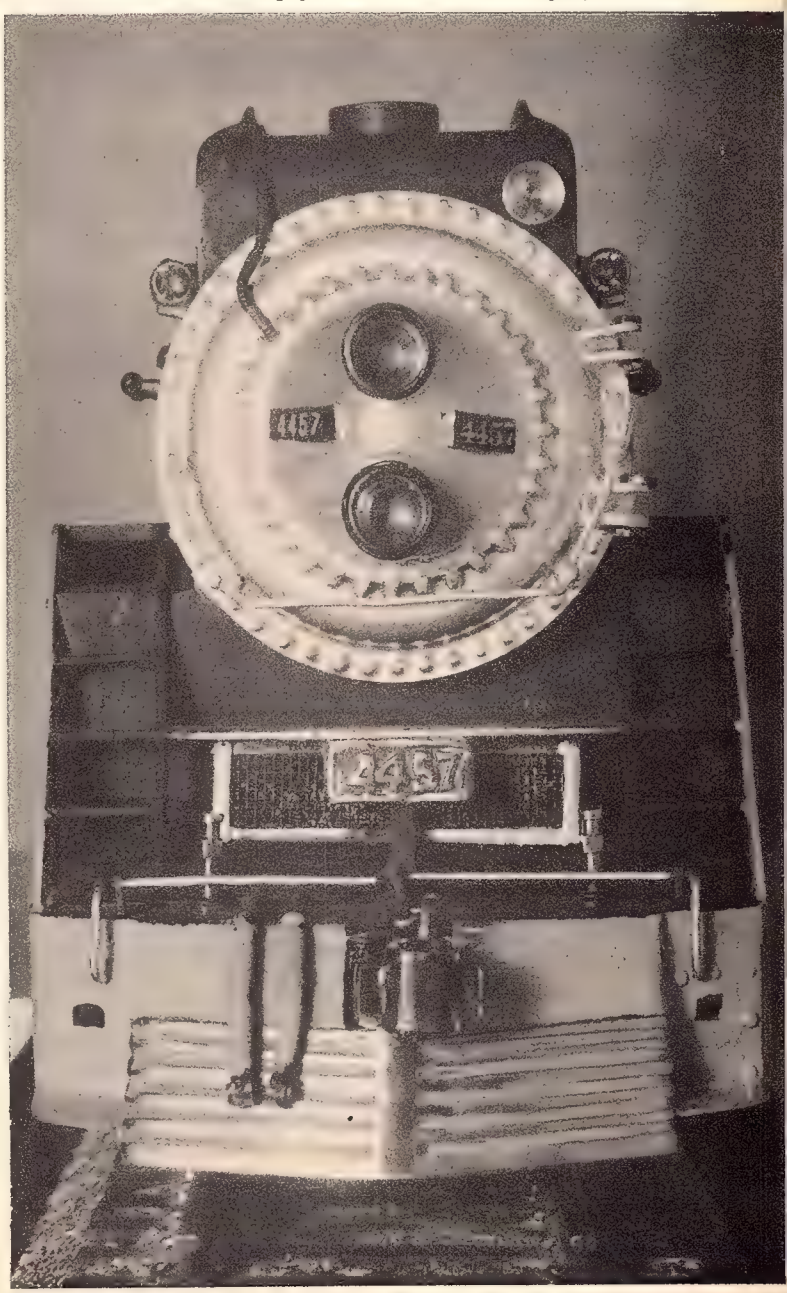
While this method of attack may sound a bit rough to the average modeler, the easiest way to tackle a job like this is from the ground up.

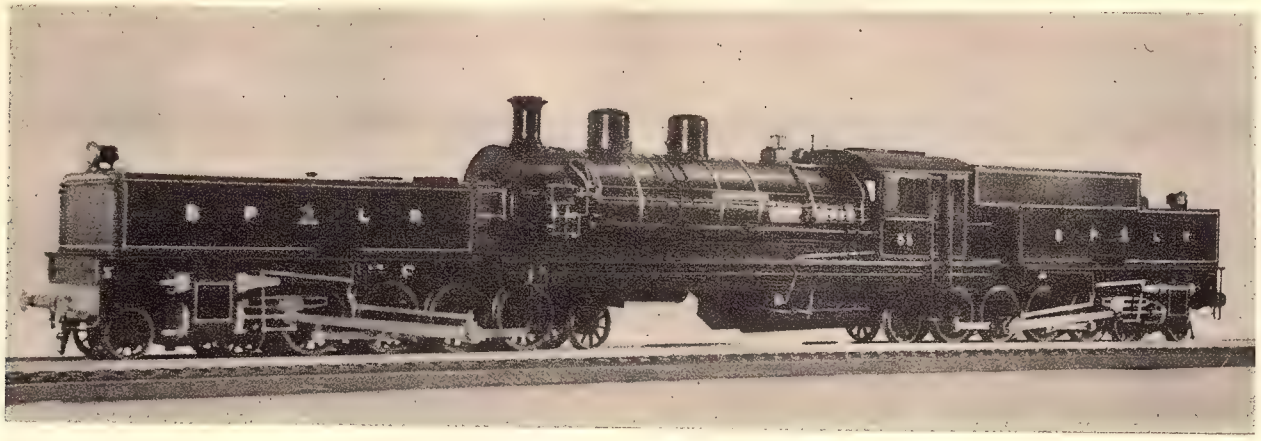
A new cab was built, and the tender reconstructed. The smokebox was built up from several cold rolled steel turnings. A large amount of superdetailing not necessary for the model's original role was added. Even the top was detailed from a drawing furnished by the Southern Pacific at a scale of three inches to the foot. For quite some time this was spread out on my basement floor, and I can still recall that it was an interesting chore walking back and forth for the length of my house to find out what went where, or scaling something off with a 10 foot rule! An interesting point to note is the three generators these locomotives carried to keep up with all their electrical demands. Note also that they carried a whistle as well as an air horn.

A number of purists will no doubt comment that the GS-4 did not sport the daylight emblem, and that the pilot was painted plain orange with no chrome strips. That is absolutely correct. However, the S.P. informed me that they were left off as an economy measure temporarily, and really belonged. So, in this case at least, the model is more accurate than the prototype. When I finally get around to building my own model of a GS-4, it's going to have them.

One of these days if you see a model with both an Icken & Graff nameplate on the boiler, you will know its history.

Front view of locomotive is object lesson in model railroad photography; it shows how minor inconsistencies normally overlooked by the eye reveal themselves to the camera lens. Such faults become even worse in the smaller gages, since the errors magnify themselves.





Custom built 4-8-2-2-8-4 Beyer-Garrett type locomotive of Russian prototype, is believed only one of its type in the United States.

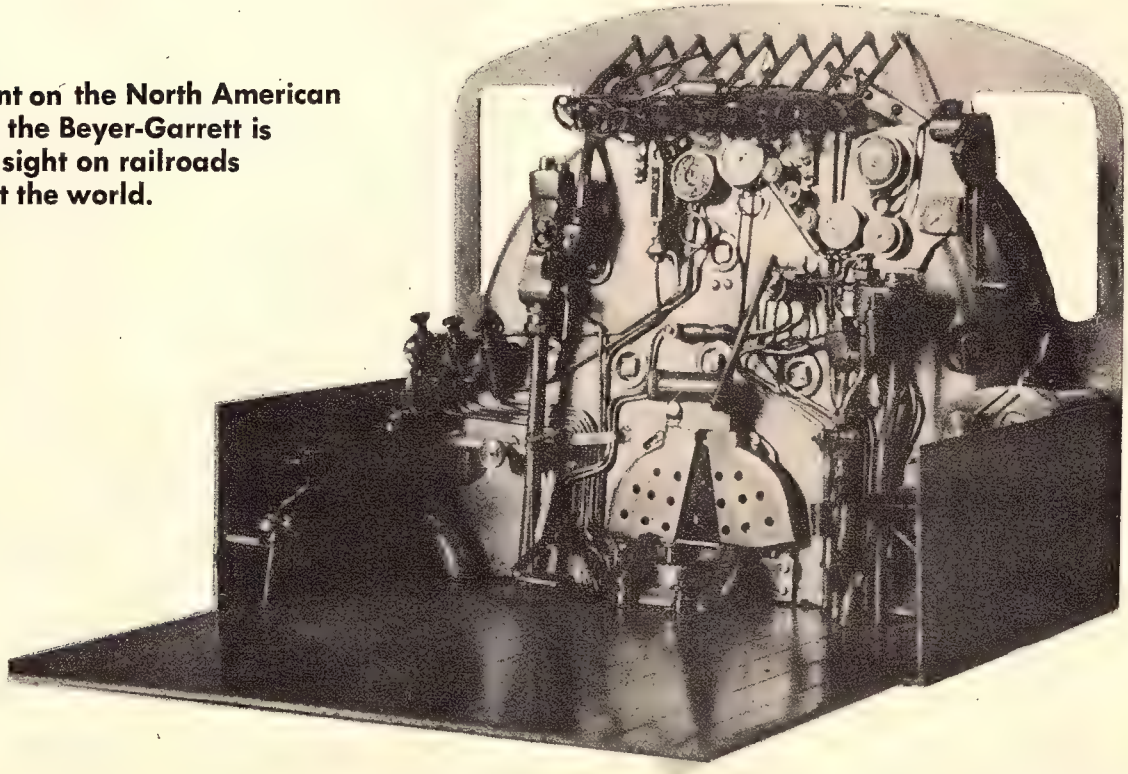
BEYER GARRETT

HERE are some photos I took of an O gage Beyer-Garrett. This model was custom built in England and is completely handmade, even to the air pumps. The model is mostly nickel-silver and has two motors. All wheels including the leading truck wheels are completely sprung. The backhead is removable and is typical of a Beyer-Garrett. Notice the butterfly doors, throttle handles, and other detail. The model runs beautifully and has a special spur and crown gear reduction so that it will coast better than a worm driven loco. Hauling power is excellent and it has been operated so much that the cast iron wheels are showing wear.

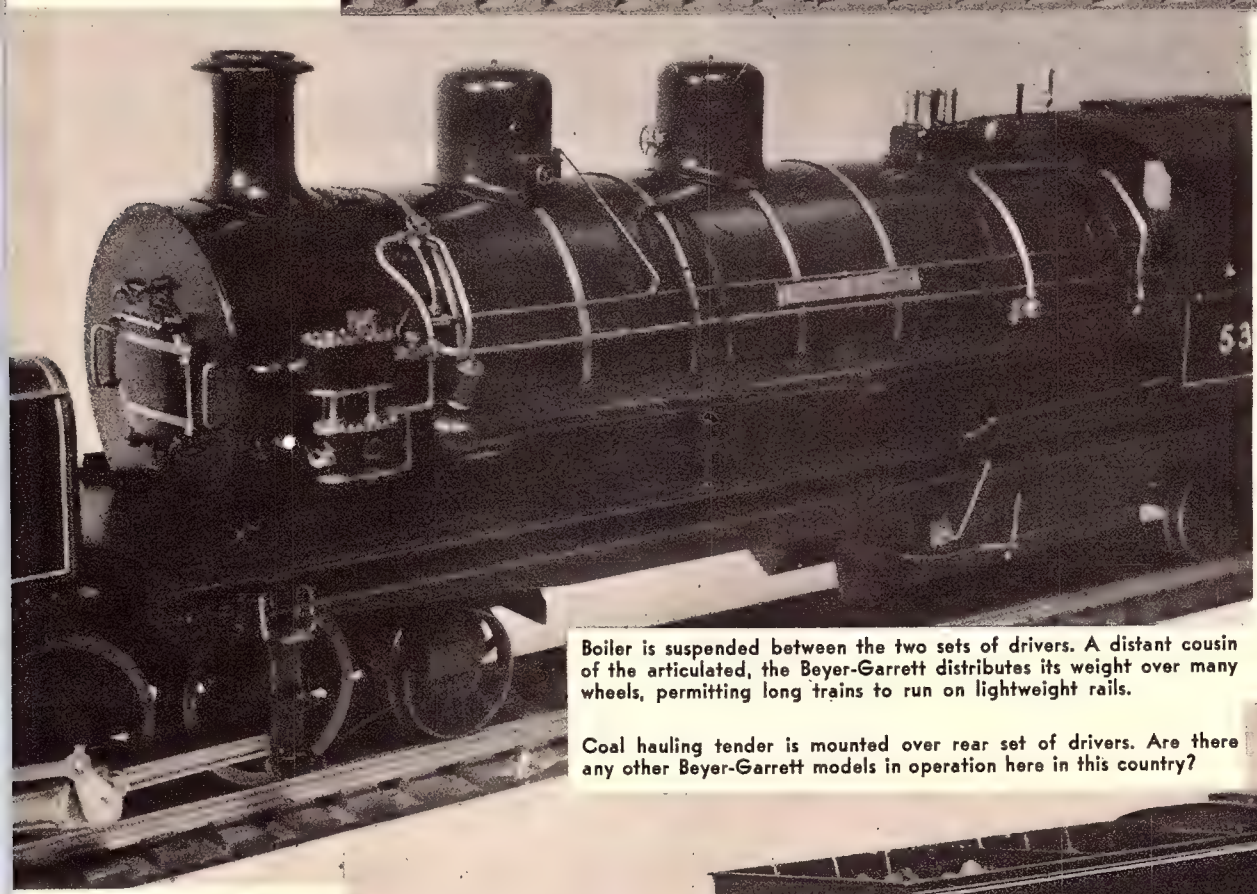
The prototype was built by Beyer in England and at last report was still operating in the Soviet Union. To my knowledge, this is the only model in the United States of a Russian prototype Beyer-Garrett.

John Holeman

Nonexistant on the North American Continent, the Beyer-Garrett is a familiar sight on railroads throughout the world.



Dials, gages, throttle, and a nightmare of plumbing in the model's removable backhead are rarely found in any steam locomotive model. Foreward section of Beyer-Garrett type contains water tank. Buffers are typically European but are also found in other parts of world.



Boiler is suspended between the two sets of drivers. A distant cousin of the articulated, the Beyer-Garrett distributes its weight over many wheels, permitting long trains to run on lightweight rails.

Coal hauling tender is mounted over rear set of drivers. Are there any other Beyer-Garrett models in operation here in this country?

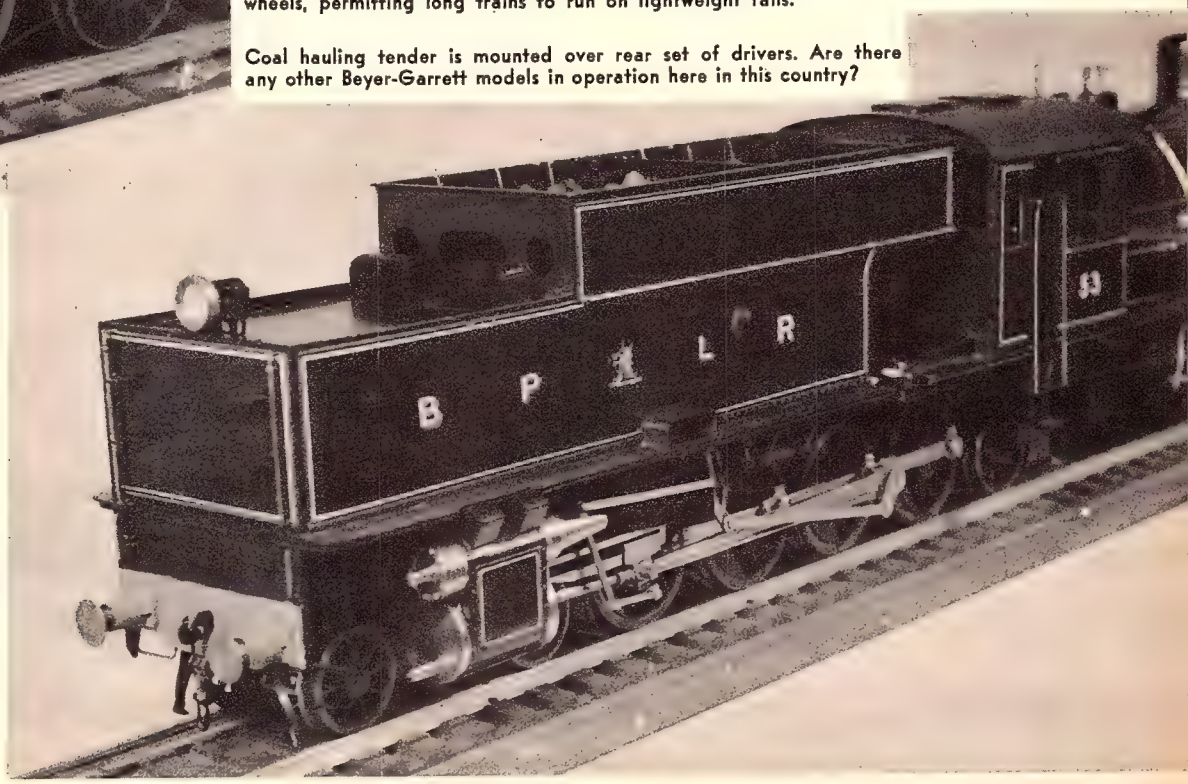
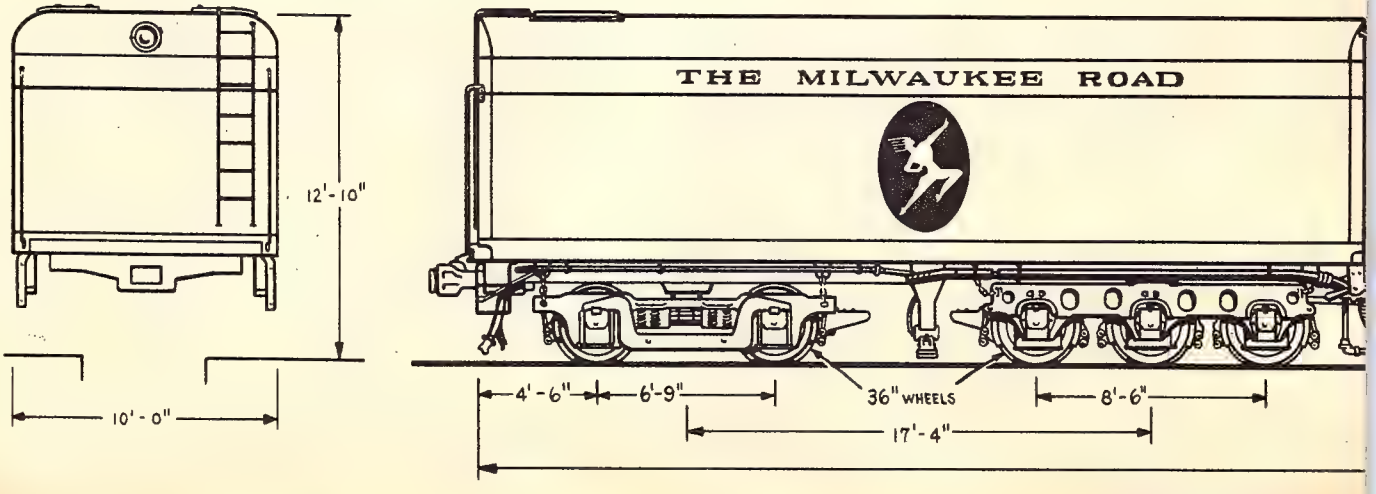


photo by Hal Carstens

The Famous Class A "Hiawatha" Locomotive

Full Size HO

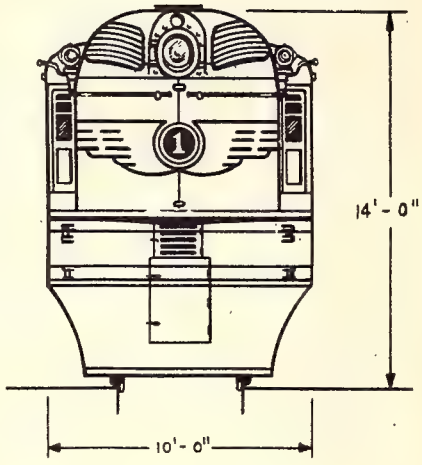
by Russ Porter



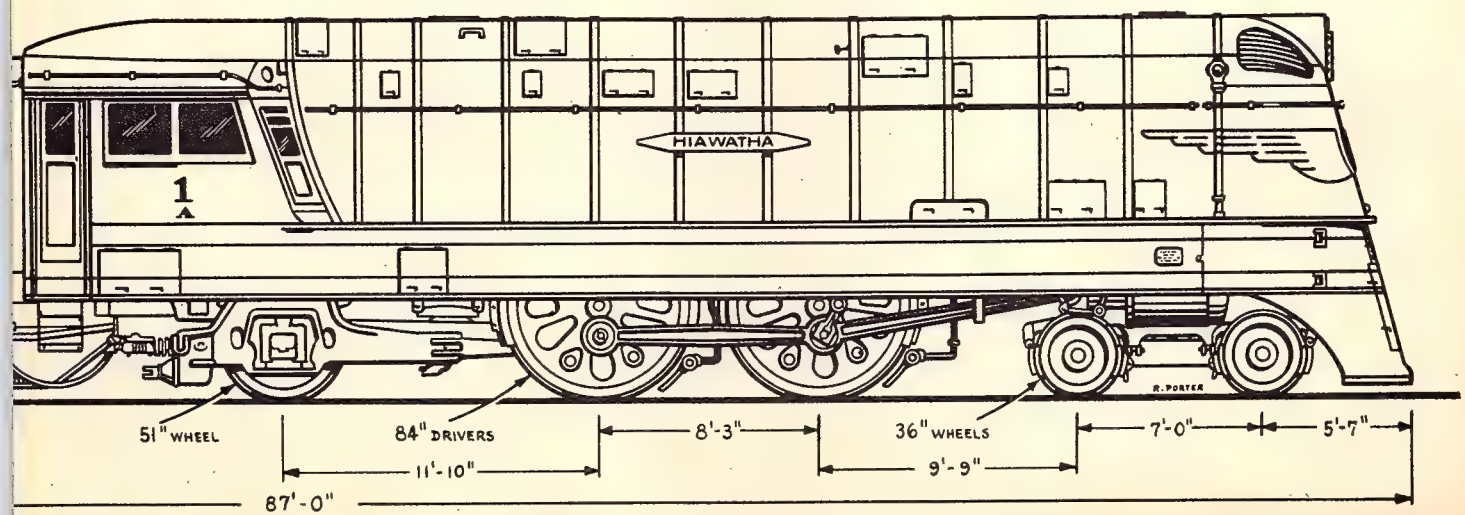
ON May 29th, 1935 the most famous of the long line of Hiawathas, which were to follow, began her speedy first run from Chicago to the Twin Cities. Built by the American Locomotive Co. in conjunction with the mechanical engineering dept. of the Milwaukee Road the 4-4-2 No. 1 lived up to her name. She took one and two degree curves at 80 and 90 mph with ease while pulling 500 tons. Her sister engine No. 2 during a test run on May 8, 1935 attained a speed of 112 mph for 14 miles and covered 136 miles in 113 minutes. Two more Class A's were built; No. 3 in 1936, No. 4 in 1937.

In 1938 the A's were replaced on the Twin Cities run by the steam-streamlined F-7 Hudsons. In 1940 the A's were placed in service on the Midwest Hiawatha run between Chicago and Omaha. Gradually diesels sounded the death drum by bumping them to local runs and by the end of 1951 all four were in storage awaiting scrap. In 1956 the Milwaukee Road donated a big 4-8-4 steamer to the city of Milwaukee.

NOTE: Models of this locomotive have been available as follows: HO—Rivarossi, still available. O—1/4" scale for tubular track, by Lionel around 1938. S—Cleveland CD models, wood kit, dummy.



Tractive force	30,700 lb.
Cylinders, dia. & stroke	19" x 28"
Total weight of engine	290,000 lb.
Weight of tender	266,300 lb.
Fuel	Oil
Steam pressure	300 lbs.
Tender capacity—Water 13,000 gal.—Oil	4,000 gal.



Here are the secrets of smooth running

HO VALVE GEAR

by Bill Schopp

ASIDE from the minor adjustments necessary in getting them to run smoothly, the biggest stumbling block in the assembly of HO steam locomotive kits is the riveting and attaching of valve gear. Many beginners are stumped by the valve gear and yet, without this **monkey motion,** the locomotive is not complete and in truth loses much of its inherent appeal. It would seem that some manufacturers omit valve gear from their kits not merely to keep prices low, but also in recognition of the fact that valve gear assembly may prove troublesome for beginers and is therefore best left off until such time as the modeler has gained sufficient experience to tackle it.

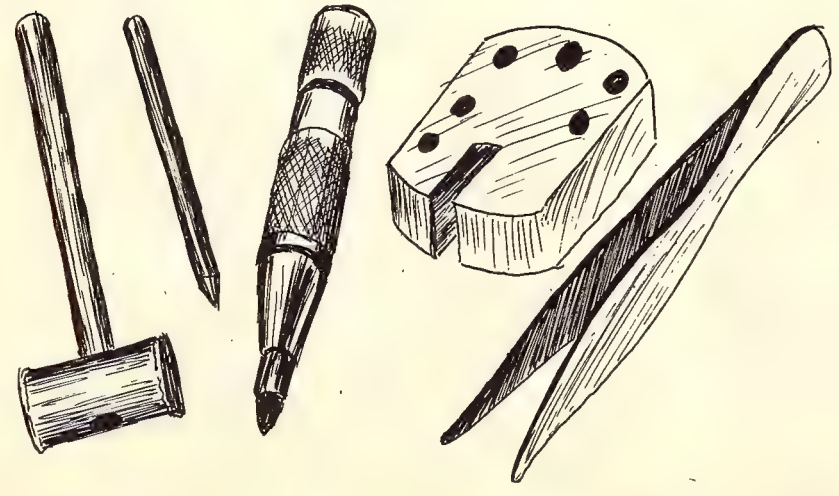
HO valve gear is, except for a few imported engines, assembled with tiny hollow rivets which are put through both pieces and then flared out at the back enough to hold them together, yet allow the parts freedom to move. Ah, what grief is concealed in that sentence, for when the beginner dumps out the envelope of valve gear parts into a small glass or plastic tray and sees the dozen or so tiny rivets he would much prefer modeling in some larger gage, preferably 4'8½" — real engines. They **are** small, as tiny as anything else you'll ever need to work with in HO or even in TT gage, in fact about as small as the main assembly screws of the average lady's wrist watch. And they need to be handled accordingly. Most kit manufacturers thoughtfully include a few extra rivets because they know they will become lost or spoiled by even advanced modelers.

Rivets should be handled with tweezers, and not great big heavy old tweezers or eyebrow pluckers, either, but tweezers that require a very light touch. Tweezers that do not come to a point can be reground on a stone so they do point up and meet. Tweezers that are too heavy and require too much effort to close and hold closed will snap little valve gear rivets into the model railroad equivalent of the "great beyond." I use and recommend jewelers' tweezers which you can buy at a jewelers supply house, at least one of which you can find in any fair sized city—if you can't find one, ask your watchmaker or jeweler to get a pair for you. The kind I favor are known as No. 3 or No. 3-C tweezers and are likely to cost around three dollars. When you get them you will be dismayed at how little pressure is required to close them: this is exactly what you need so you don't squeeze rivets, etc., away.

In addition to light tweezers, you need a few other tools for work with HO valve gear. One of the most important is a good solid metal surface to work on. This can be almost anything that will stay flat on your workbench. I prefer a jewelers' bench-block which is really just a block of steel with a small working surface and some holes in it which come in handy as I will explain later. You need something to flare out the back of the rivet. Penn-Line makes and sells (as well as includes in their steam loco kits) a special **rivetool** which many modelers use with success (directions are included with each). I use a centerpunch which with the pressure of the hand or a light hammer tap will begin the flaring out. In order to avoid using my left little finger as a third hand to hold down valve gear while holding punch with the rest of the left hand and the hammer with the right hand, I have even used an automatic center punch to flare out the rivets. You have to have a good supply of rivets when you do this, however, since the automatic punch raps too hard, even at its lightest, and you are likely to tip the rivet over and mangle it. Once the rivet is flared, use a light hammer to spread it out flat. Work the parts riveted together back and forth to be sure they are free to work. Usually you can free any bind by working the parts with your hands, but if not, remove rivet and start again—of which more later.

As to a light hammer, I know of none on the market light enough for this job as well as other jobs in HO (such as rapping in handrail posts), so I made one from a piece of ½" diameter brass rod about 1" long. This has a cross-hole in its center which is a tight fit for a Tinker-Toy stick which serves as a hammer handle. If you don't have the facilities to make such a hammer, surely you can find somebody with a lathe or even a drill-press who can drill the cross hole to take

These are the basic tools required in valve gear work for HO: (from left to right) light hammer described in text, home made center punch, automatic centerpunch, block, tweezers.

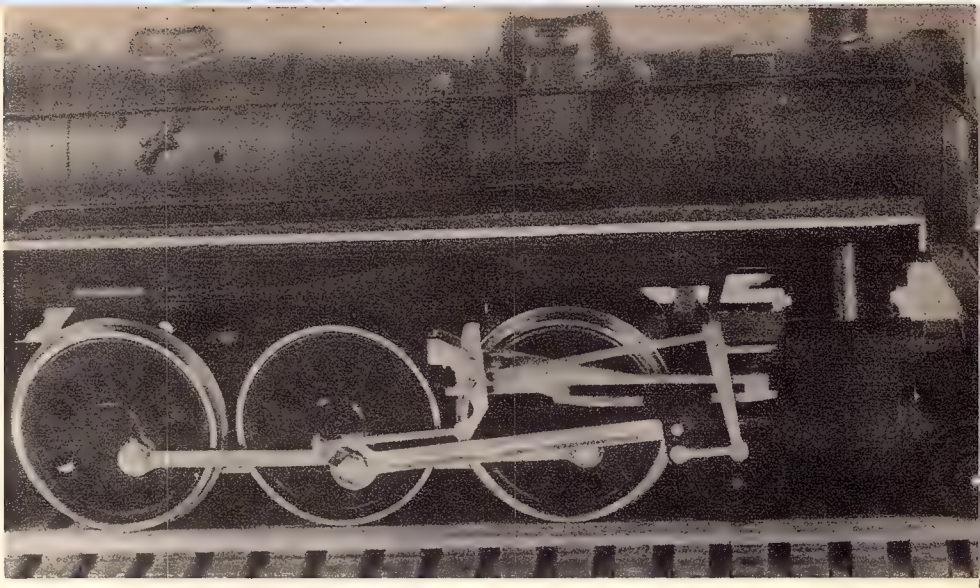


whatever manner of "handle" you can scrape up.

Now you sit the rivet head down on your metal surface, slip on the first or outer valve gear part, then the second part, then spread and flatten the back of the rivet. Very often the rivet will not sit flat on the metal surface, but tips over and causes you all manner of trouble. This is due to a little unwanted nib in the center of what should be the flat head of the rivet, left over from when the rivet was turned on a screw-machine. This must be disposed of before you can do decent riveting. My method is to use one of the smallest holes in my bench block, insert the nib in there, and simply break it off by scraping the rivet, held in the tweezers, off the hole as in fig. 1. Alternately the rivet, held in tweezers, could be run back and forth on a fine file or coarse stone to remove the nib.

Some attention must be paid in valve gear assembly to which piece goes on top, something which is usually covered visually in the kit assembly instructions. Study the drawings and see which goes on top, then insert rivet through the appropriate hole, lay the two pieces on bench block, lay on the second valve gear piece, and rivet away! See fig. 2. Some confusion may develop since the drawing shows the front of the assembled valve gear and you do your riveting from the back. You should pick up the assembly after each step and hold it against the required side of the locomotive to be sure that you have not made a mistake. Starting with the crosshead-link, combination lever, valve rod, and radius rod, you can usually just swivel the parts around 180° to correct a mistake, but once you rivet on the knee-shaped reverse link, you are committed. It is a favorite mistake of beginner and old-hand alike to get this reverse link riveted on facing the wrong way. You can help avoid this trouble by remembering that the knee of the reverse link always faces forward, and, while issuing axioms, the crosshead link always points backward from the combiantion lever **to** the crosshead itself. Next comes the eccentric **rod.**

Up until this point it is not a matter of vast importance, really, which piece goes outside of which since you can always bend the parts a little to adjust, but the eccentric rod MUST go on the outside of the eccentric itself so that when the eccentric crank revolves with the driver, it does not tangle itself up with the eccentric rod. You will usually find a little snivvy, representing an oil cup, at the extreme ends of each side's valve gear, the crosshead end of the crosshead link, and the eccentric end of the eccentric rod. These should be **up.** However, to avoid dismantling a part of the valve gear I think I would let them be down if some error along the way had placed them that way. Better yet, I would grind them off with a cutting disc in a motor hand tool or even file them off.



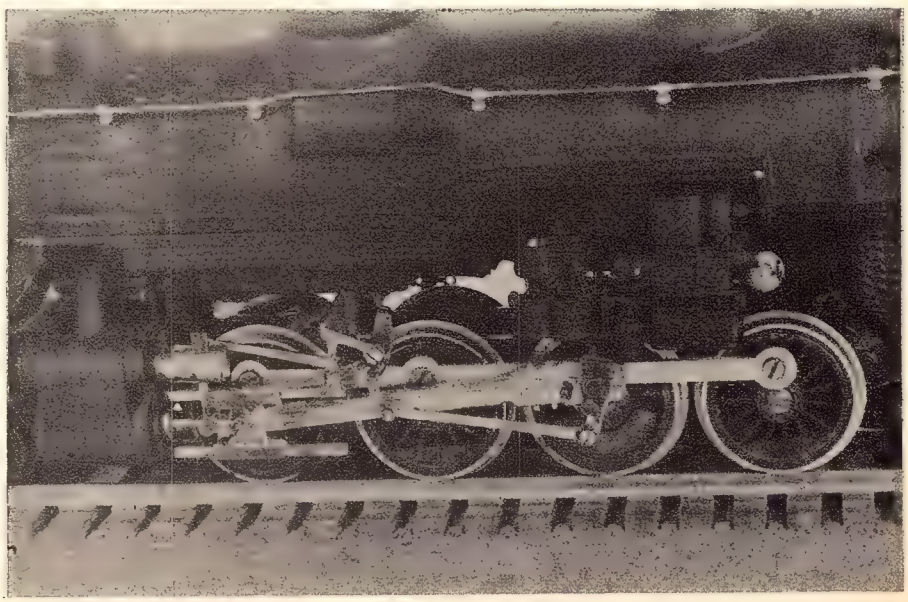
Mantua-Tyco Pacific has good clean valve gear. However, author suggests attaching knee-shaped link to valve gear hanger with 00-90 screw instead of with rivet. Valve gear makes the loco.

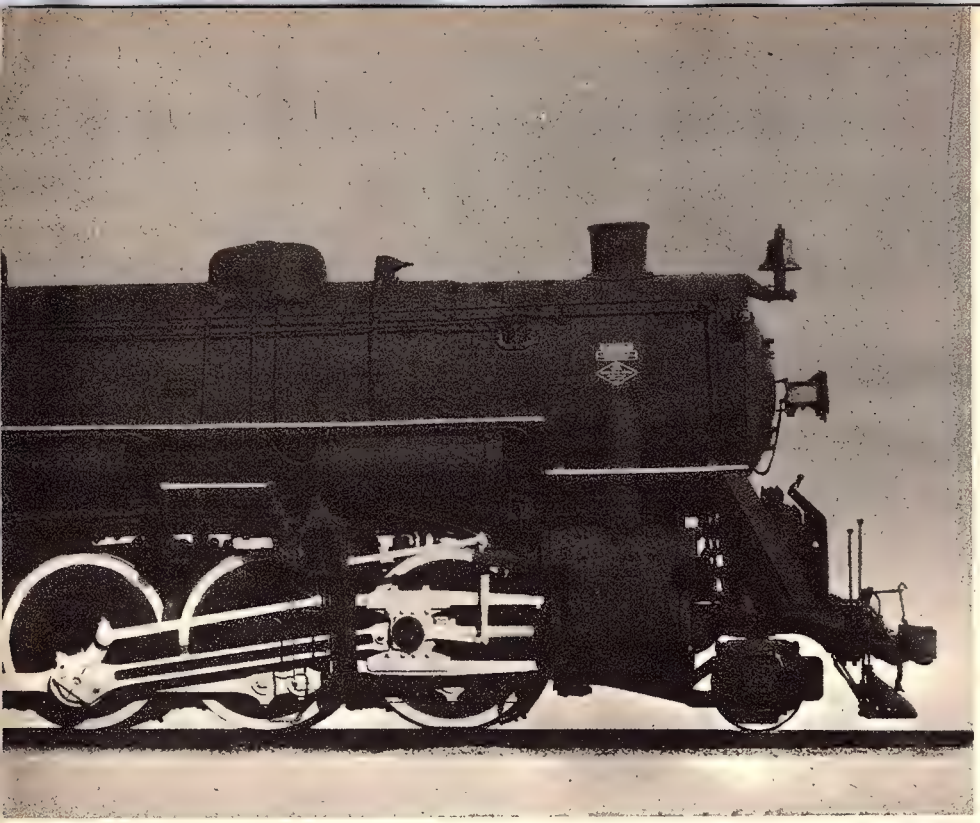
So far I have said nothing about attaching the valve gear to the engine, although the instruction sheets usually do. After a survey of various locomotive models built from kits and of instruction sheets for others, I can find only one engine that meets **my** requirements for attaching valve gear and that is the Model Die Casting Atlantic. On that engine the crosshead link is attached to the crosshead with a screw, the reverse link is attached to the valve gear hanger with a screw, and the eccentric is attached to the main crankpin with a screw. Consequently by removal of these three screws, the entire side of the valve gear can be taken off for repairs.

Fortunately other makes of kit locomotives can be converted to these requirements with little work. The crosshead link always attaches to the crosshead with a screw. If this is also the pivot for the front of the main rod, you **may** find a binding at this point when you add the crosshead link to the assembly. It should not bind, of course, and to overcome this, I suggest grinding or filing away the boss that sticks up around the screw-hole in the crosshead. Alternately use a screw with a longer shoulder. The longest screw in this respect is the Varney crosshead screw No. 1761 which **is** available and is recommended for other make engines where you get a bind at this point.

To attach the reverse link to the valve gear hanger, use a 00-90 optical screw. A package of these and a 00-90 tap should be in every modeler's tool box. The holes in valve gear are always in my experience of such a size that they take the tap without trouble. Both the holes in the hanger and in the reverse link should be tapped so that the link may be placed slightly inward from the hanger to prevent the rivet attaching the radius rod from snagging on the hanger. Excess length

Varney economy Mikado with slightly altered valve gear nevertheless shows clearly method of using optical screws to fasten link to hanger, and the eccentric rod to eccentric.





of screw may be snipped off with pliers.

Attaching the eccentric to the main crankpin is where there is often trouble. Manufacturers have a variety of ways of doing this. The "old line" Varney engine's were sound from an engineering standpoint here, but unsound from a practical viewpoint. The main crankpin was tapered and sat in a tapered hole into which it was held tightly by a screw **through the back** of the driver. The end of the crankpin was cross-drilled as was the die-cast (later plastic) eccentric so that the crankpin could be tightened up by the screw and the eccentric locked in the desired position. However, unless very tightly locked, the screw through the back of the driver would work loose, letting the eccentric slip around, usually fouling up the whole valve gear on that side. The remedy, in case you have one of these engines and have that trouble, is to work the drivers around, by turning the motor by hand if necessary, until the loose screw is at the bottom. Then you can usually reach in angularly with a screwdriver from the bottom and, with the eccentric held in the right position, tighten the screw up.

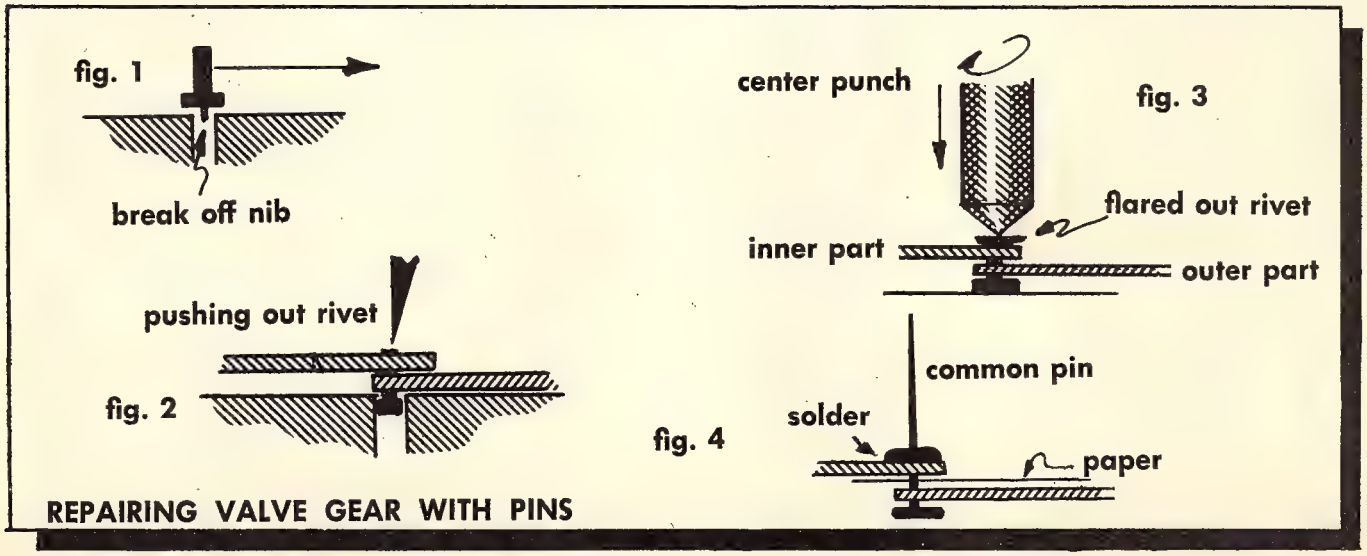
Later Varney steamers such as the Old Lady have a regular shouldered main crank-pin screw, with 0-80 threads, which screws into the drivers in the usual way, and the eccentric, being plastic, is riveted on. It is a better idea to crossdrill both the tightened pin and the eccentric and pin it on, and an even better idea to substitute a stamped metal eccentric which you can then **solder** to the outer end of the crankpin.

In general I favor tapping out the holes in all cast metal or plastic eccentrics (Varney and Bowser) and attaching the eccentric rods with 00-90 screws. Draw the screws up dead tight, snip off the back end, then loosen the screws, jamming the cut off threads in the hole. Another idea is not to run the tap quite all the way through the hole so that the last few threads are imperfect and the screw will have to cut its own, making for a tighter fit. However the stamped metal eccentrics (Penn-Line, Mantua, Central Valley, Kemtron) have to be riveted to the eccentric rods whether the eccentric crank itself is soldered or screwed to the main crankpin.

Bowser locomotives, unfortunately no longer in production, had smooth headless main crankpins with 0-80 threads on one end to screw into the main drivers. The eccentrics were split at the wide ends and had holes tapped to take 00-90 screws which pinched the eccentrics on the pins when they were tightened, holding the eccentrics in position. To get the crankpin in tight enough to withstand the twisting the eccentric would sometimes give it, you would have to use pliers, allowing a rather risky amount of force to be used. My preference was to grind a slot in the "head" of the main crank pin with a cut-off disc in a motor hand tool, then insert the crankpin in the usual way with a screwdriver. There are two possibilities for holding the eccentric tight on the crankpin. One is to nibble a bit of knurling on the end of the crankpin with diagonal cutting pliers. The other is to crossdrill eccentric and crankpin, and pin as in the early Varney locos.

When your permanently connected (by pin or solder), crankpin and eccentric come loose or drop out on a locomotive such as described—it can also happen on certain imported locomotives which are beyond the scope of this article—they can be replaced, if not damaged, without taking down the valve gear. Just work the driver (by turning motor by hand if necessary) to the crankpin hole's most forward position. At this location, you can screw the pin with eccentric back in the hole, tightening up with light pressure with pliers or tweezers.

The Model Die Casting Atlantic mentioned previously as ideal in its attaching has a permanently mounted main crankpin that is tapped out at

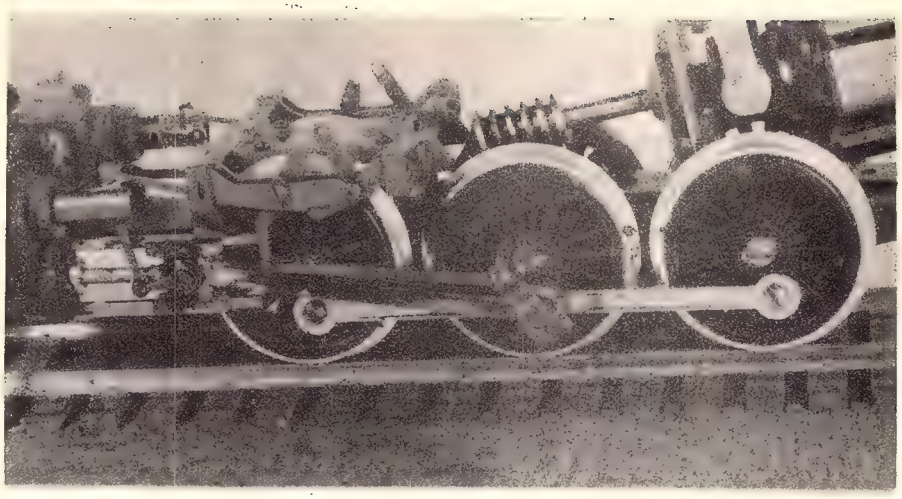


REPAIRING VALVE GEAR WITH PINS

the end so that the die-cast eccentric can be pinched in place with an 0-80 screw. This makes the most sense, except that the permanent crankpin makes it difficult to use these wheels for any free-lancing work — which may not concern **you.**

Although a stamped metal eccentric is far from as realistic as a die-cast or plastic one, it does have the advantage of being more easily attached. Both Mantua and Penn-Line steam locomotives pinch the eccentric between the head of the screw and a piece of tubing slipped over the screw, acting also as a shoulder and as bearings for the rods. If you are assembling one of the older Penn-Line kits you may find that the valve gear material is very soft and that the eccentrics are all too easily mashed back against the rod in handling, again fouling the works. The remedy is to replace them with newer Penn-Line or Mantua eccentrics which are preshaped and quite stiff. Some of the **old** Central Valley eccentrics were pretty soft material, too, and the remedy is the same.

If you mis-rivet valve gear, either too tight or the wrong way, grind off either the head or flange of the rivet with a motor hand tool (or a fine file), and push the rivet out with your tweezers while holding it over a suitably sized hole in your bench block. See fig 3. If your valve gear comes apart after installation on the engine, you can drop it all off and repair if it has been mounted with three



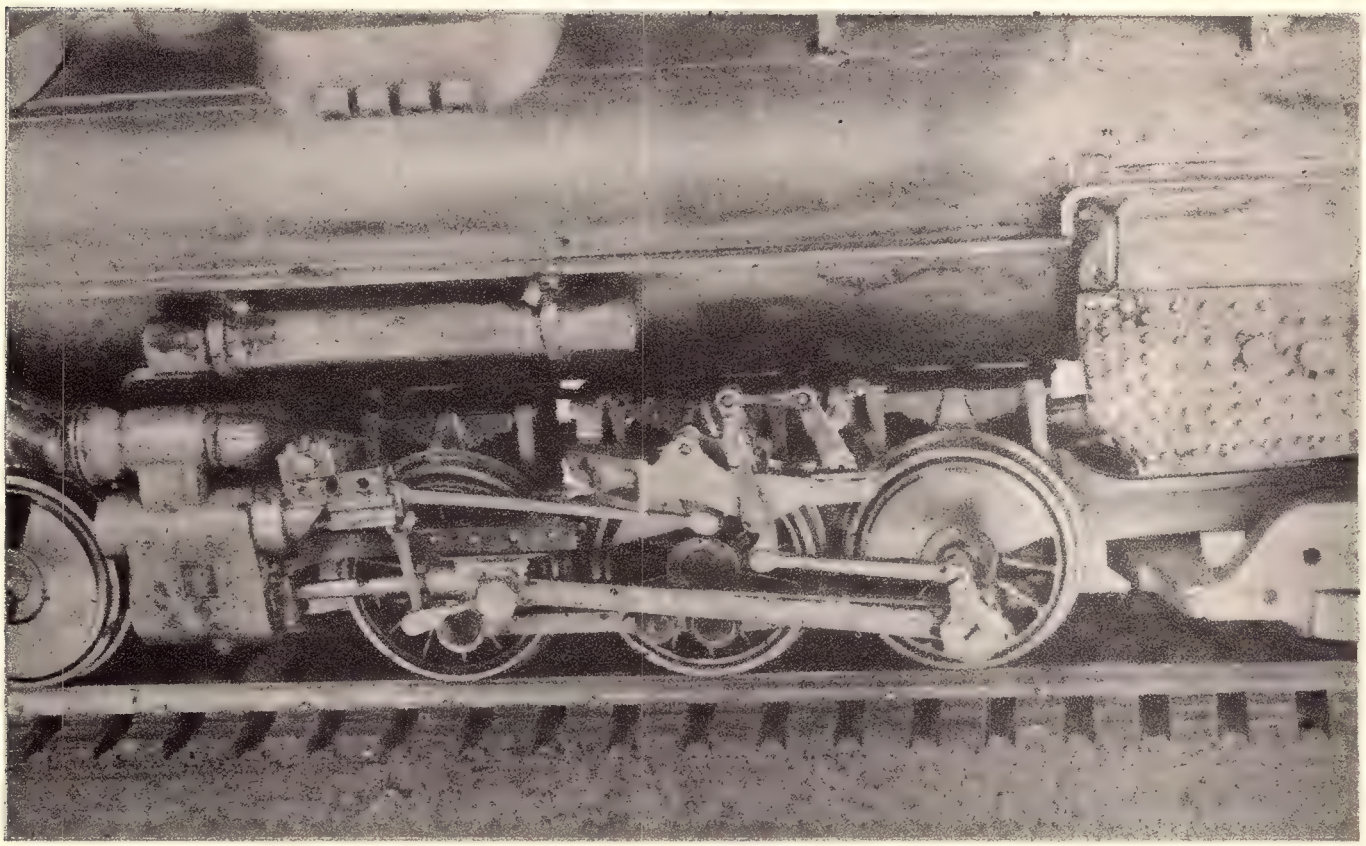
Super valve gear for Varney Pacific is one of the toughest to assemble but results are worth the effort. Notice two optical screws used to attach link and lifting crank to hanger.

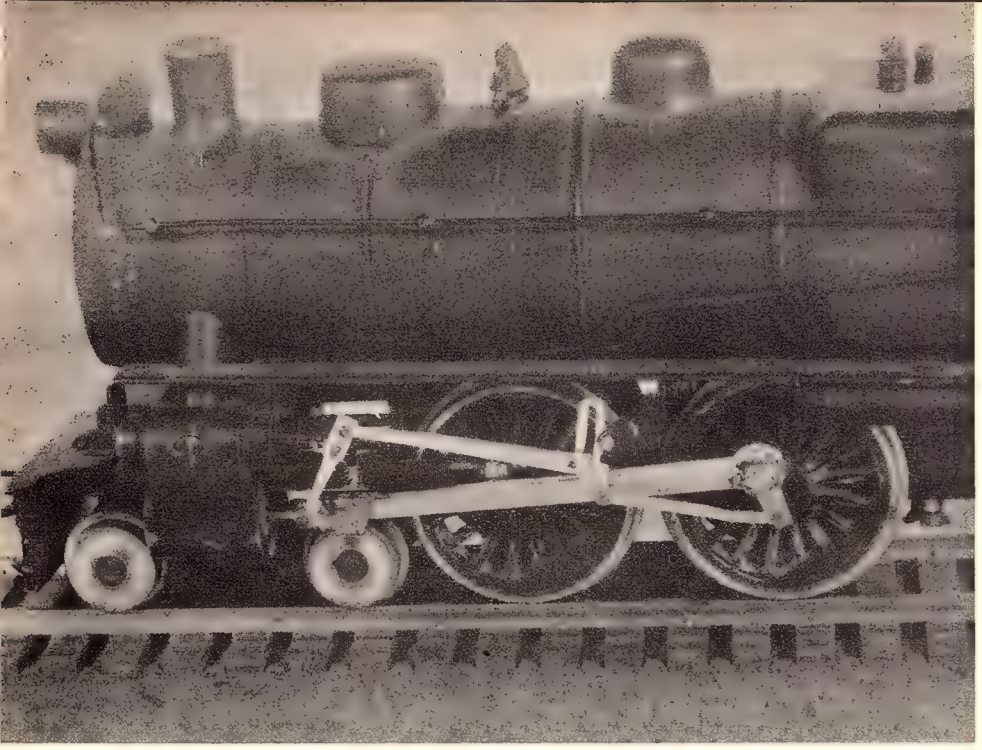
screws. But it is a lot quicker to repair it with a pin. Insert a pin from the back, using tweezers. Sandwich a piece of paper between the two parts. Dab outer part and pin with soldering flux, and solder the pin to the outer part. Tear out paper which should give enough freedom of movement of the parts. Then snip off excess length of pin and either grind or file the other surface flat. This is shown in fig. 4. I have, in fact, soldered up valve gear right on an engine using this method when I ran out of rivets. Of course if the parts get accidentally soldered together, which the paper is supposed to prevent, you are in a mess and have to melt them apart, clean off all solder, and try again. A speck of oil on the inner part will help prevent their being soldered together.

Since you can, as explained above, repair a parted valve gear without dismounting it, why then attach it to the hangers with screws? Answer is that it makes it easier to attach **in the first place.** Unless you have had the "pleasure," you haven't lived until you have dangled two sets of valve gear and a valve gear hanger around putting it in place.

The vast majority of HO locomotive kits that have valve gear have Walschaerts type. The other type that was

Baker valve gear on Winton articulated is rare on model locomotives. This is the long frame type and consists of several lost wax castings. The same or triangular frame also from Kemtron.





Penn Line locos provide slot in link for radius rod to ride in when engine is reversed, but link still attached with rivet to hanger. Author suggests substituting an optical screw.

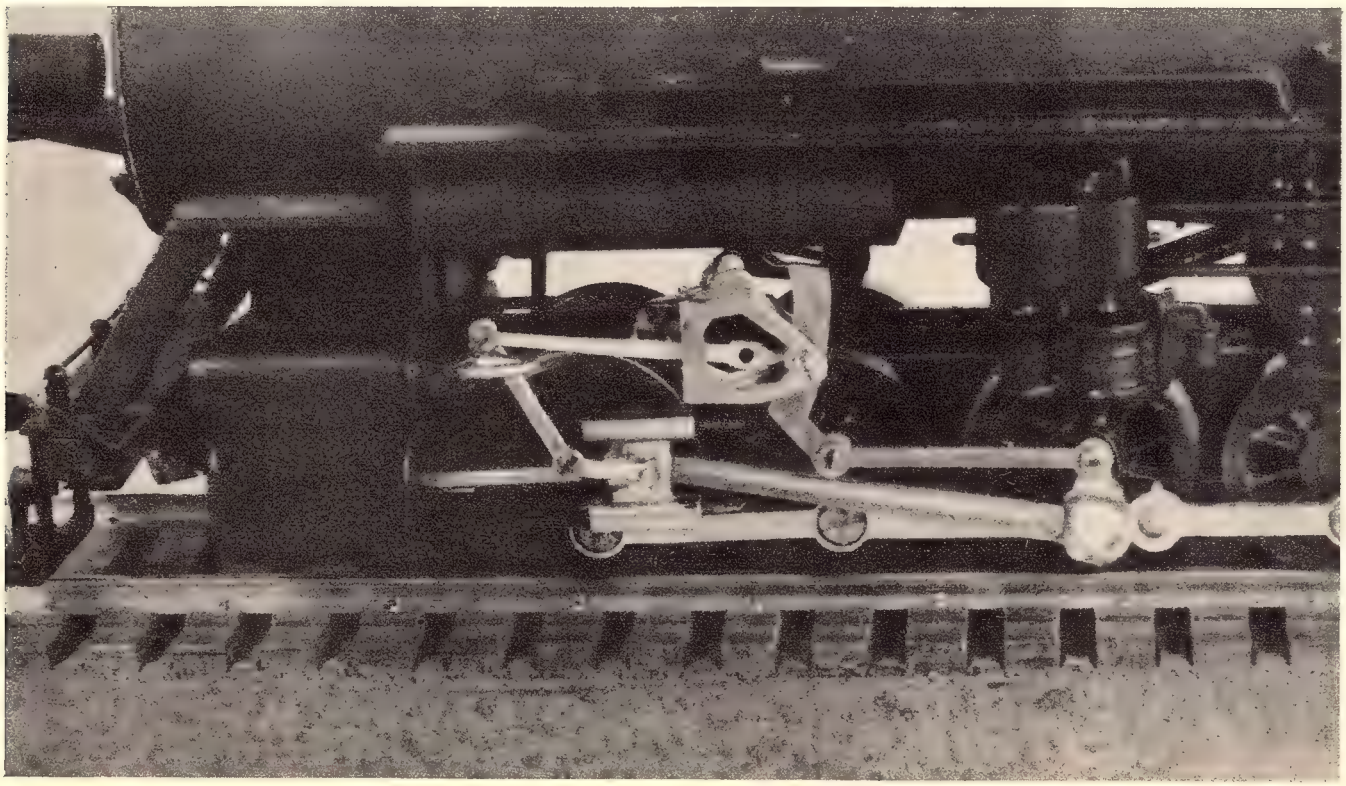
in fairly common prototype use was Baker valve gear which had the advantage that all parts (excepting radius rods and eccentric rods) were identical for all engines. The only difference was in the hangers which were "long" to rightly locate the valve gear with locos with 69" or larger drivers, and "triangular" for engines with smaller drivers. The only domestic kit engine today with Baker valve gear is the Winton lost wax articulated. Certain of the imported locos such as the Tenshodo Hudson and eight wheeled switcher have Baker valve gear, also. Kits for Baker valve gear are available from Kemtron for either long or triangular frames, all lost wax castings which snap together rather than rivet.

Certain locomotives, even when viewed in prototype, seem to have **no** valve gear. These are old-timers and are usually characterized by "box-top" cylinders. Such locomotives are the Mantua General, Belle, Mogul, Goat, Busy-B, the Model Die Casting 0-6-0 with or without tender, and the Kemtron Teakettle. Actually the prototypes did have Stephenson valve gear which was almost entirely inside, between the frames, worked by eccentrics mounted on the axle. The only visible part was a rod running into the "hat" of the cylinders, which connected with a lever which was actuated by the eccentrics. So, for HO model purposes they have no valve gear worth mentioning. Actually the old "Brass Betsy" 2-8-0 had an eccentric mounted on its front axle which did work this valve rod back and forth in realistic fashion.

I hope I haven't scared you with what purports to be a comprehensive treatment of working with HO valve gear. If I have, then there are always diesels, electrics, and old-timers. Just be sure valve gear is free but not floppy. A speck of oil at each pivot point doesn't hurt a bit. Whereas most instructions suggest you angle the eccentric 15° away from the center of the wheel, my recommendation is to try to keep the eccentric in line with the center of the axle. Of course such a prototype locomotive would not run, but by reducing that 15° to almost 0°, you also reduce the amount of motion of the parts and will have less trouble.

Another tip: model valve gear is almost always nickel plated to make it stand out and improve the appearance of an engine. But most real steam engines that you see or did see had just black valve gear except for piston and valve rods. Of course valve gear should not be painted with ordinary paint because it will gum the works.

A number of imported locomotives have valve gear assembled with tiny shouldered optical screws, an idea which has merit. Model shown is International's MKT 0-8-0 switcher, in HO.



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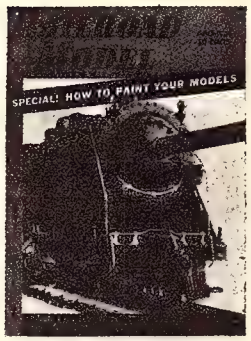

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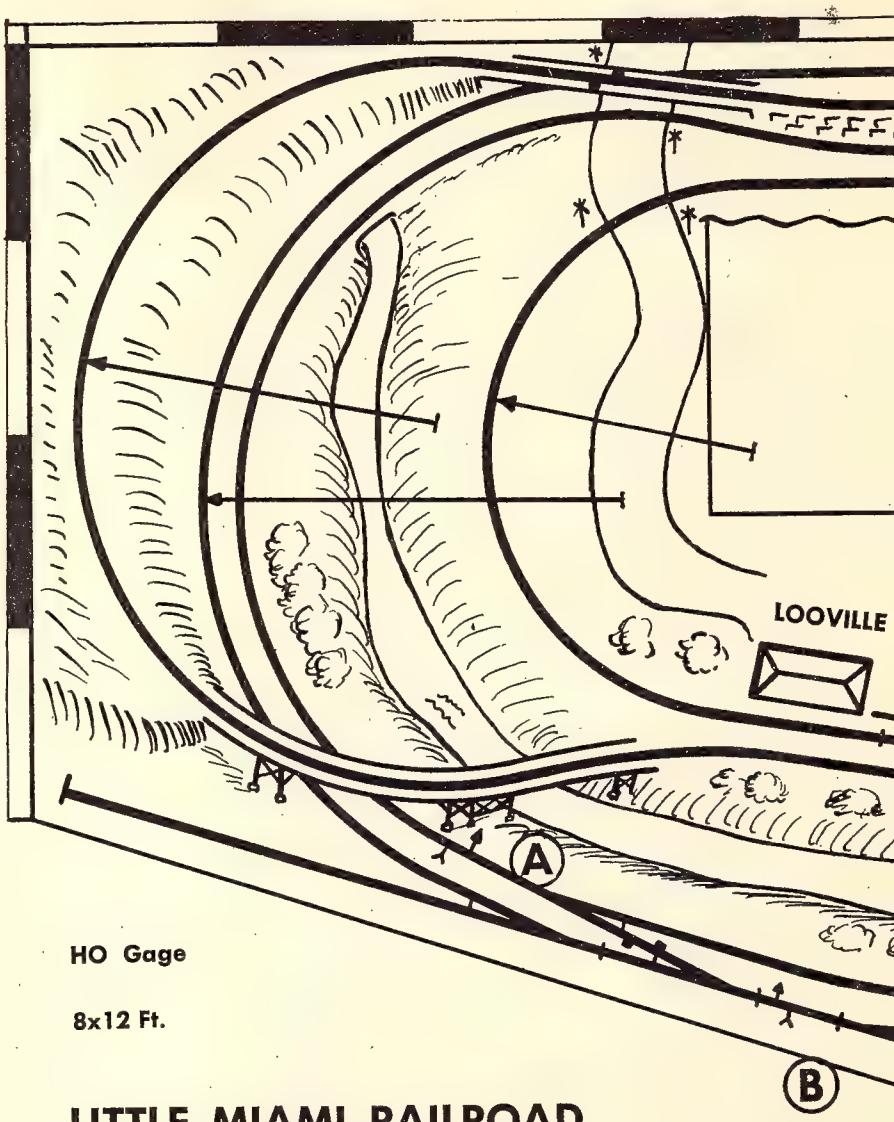
2 Medium Sized Layouts

by the layout doctor

Track maps by Russ Porter



HO Gage

8x12 Ft.

LITTLE MIAMI RAILROAD

AFTER all, when you have a small layout space such as four by eight feet which is fairly popular, you build a layout which has to sacrifice the amount of trackage to scenery or scenery to track. There are just so many basic ideas—not too many at that—that you can work in a small space, but when you get into a medium sized space, the variations on even a single theme increase greatly. When you get into a very large space, which we will not here, both the themes and the possibilities increase to the point where you are apt never to settle on a final layout! For a medium sized space we present this month two variations on the inside-out-figure-eight or twice-around-oval idea, any one of which should make you a good railroad for modeling.

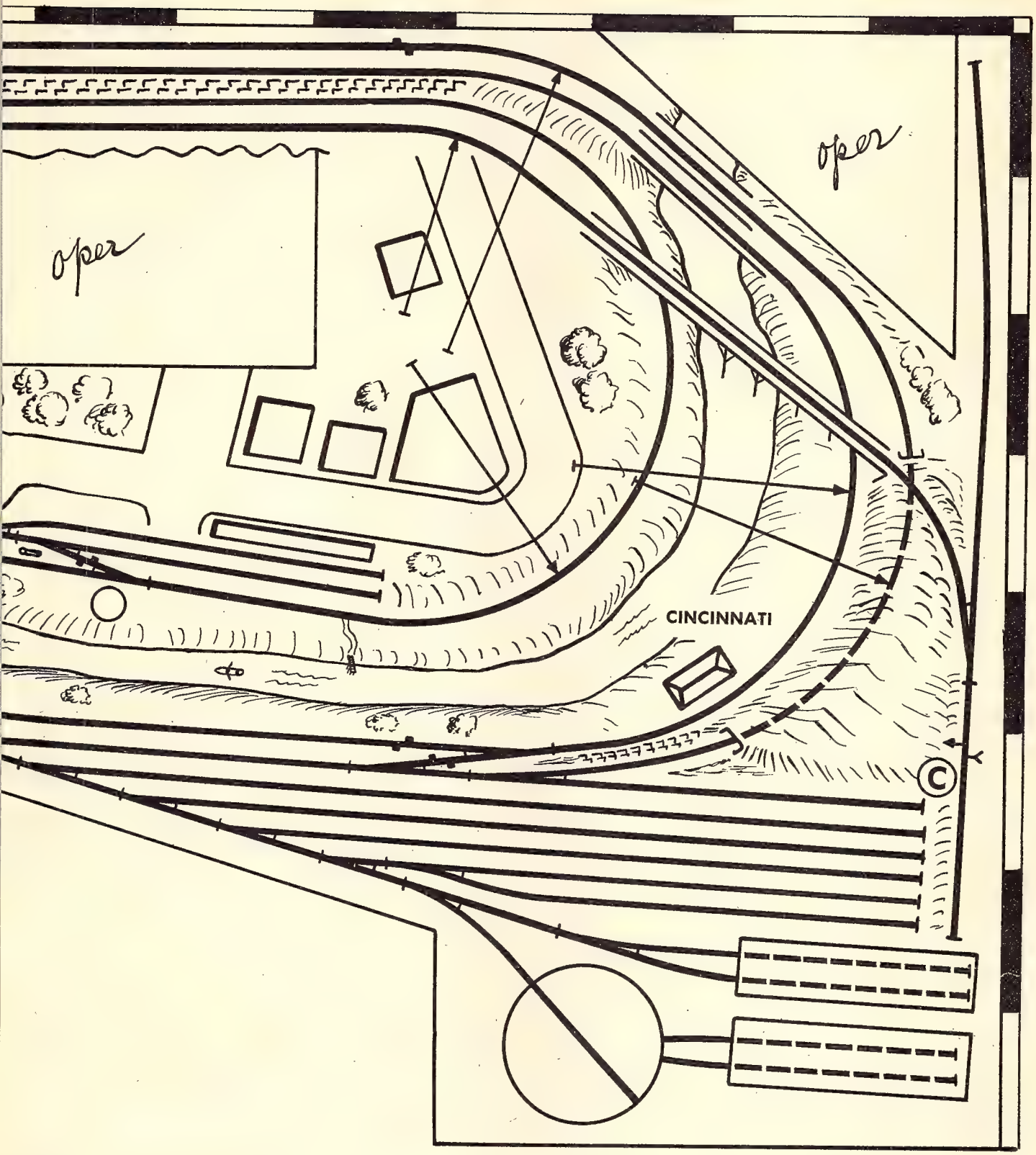
The **Little Miami Railroad** has a name that is not intended to be cute but is actually the name of one of the subsidiaries of the P.R.R. which you might have seen lettered over the inner door, inside the vestibule of a coach—L.M.R.R. It fits an 8 x 12 foot space, or to be more specific it fits inside an 8 x 12 foot room so that no open space is needed around it except the trapezoidal space at lower left used for entrance to the room and for controls.

The L.M.R.R. in model form is begun constructionwise with the laying of the yard lead oval, a level circle with a minimum radius of 24". Off this there are four No. 6 switches, to two industries and to the main line via crossovers. There is also a No. 4 switch which leads to the yard wherein there are more No. 4 switches to body tracks, but only No. 6 switches to the turntable and diesel house. This means that engines need **not take the curve** of any switch sharper than a No. 6. Switching engines with cars, however, will take the approximately 20" radius of No. 4 switches. The wide radius of the yard lead oval (and indeed later of the main line) will permit you to run any HO engine now made although in truth articulateds look a bit silly even on 24" curves (but then they are meant for sharp curves which is why they are hinged, so that they look just as silly on a curve in real railroading!)

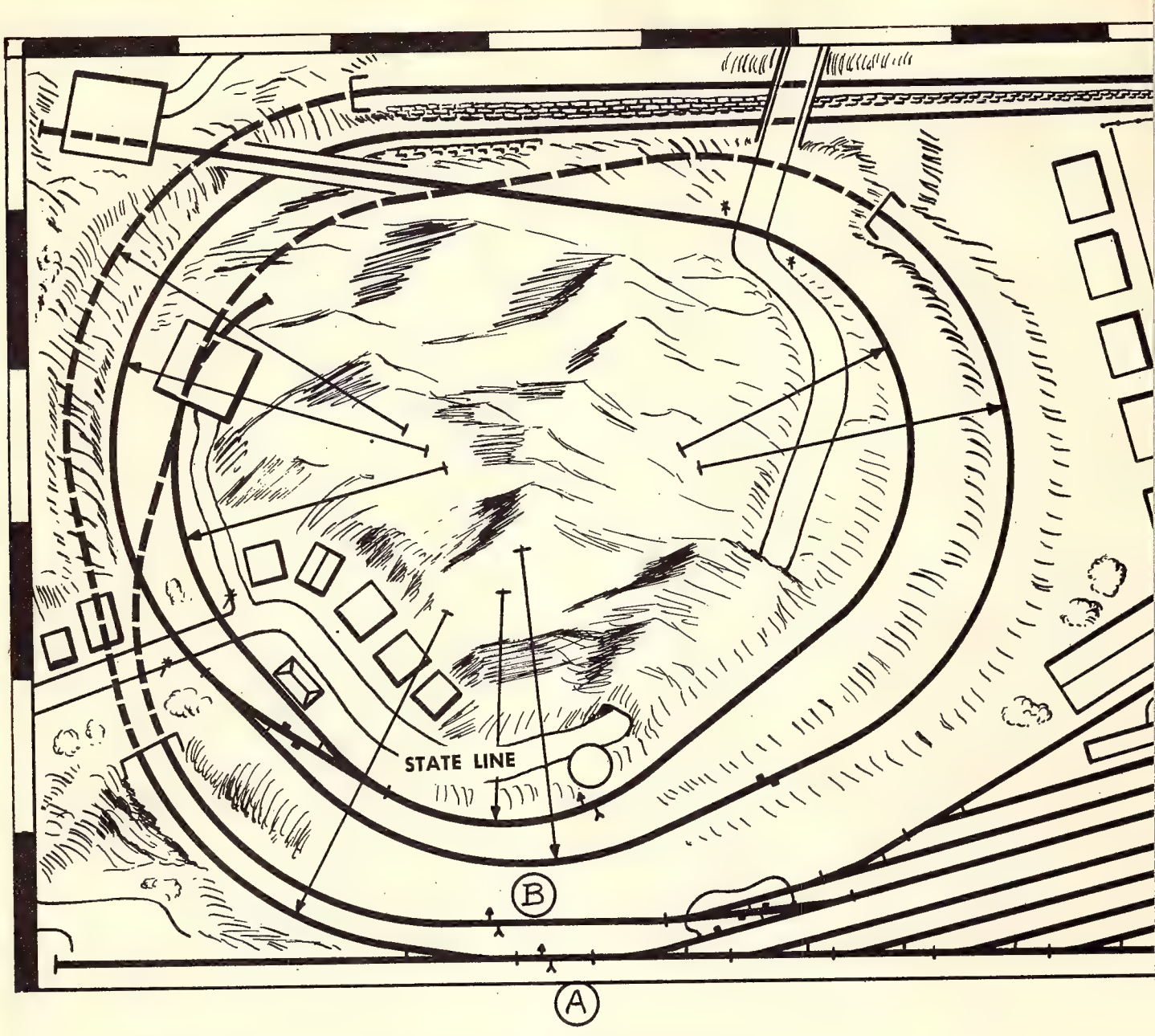
The main line past Cincinnati station divides into a run-around track, then follows the yard lead oval around the outer curve of the river at left and does not begin climbing until it has almost run out of sight. Then the grade is 1:36, a little less than 3%, just a little steeper than sometimes desired on a model pike, but really not bad. It will force you to run short trains and double-headers so that the railroad will not seem as short as, in scale miles, it really is (an HO scale mile is about 60 ft. of track).

The main line's summit is reached at Looville which is conveniently just across the river ((perhaps it is the Nohio River) from Cincinnati so that the brass hat (you) can reach across for adjustments. Thence the single line curves across a long trestle and around the upper left corner, then down a 1:48 (2%) grade to Cincinnati.

Notice that there are no passing sidings on the main line unless you'd want to call the run-around facilities at Cincinnati yard that. If you use it for meets between opposing trains, then you would also need other passing sidings so they could meet again



For the average modeler, the most practical layout is of medium size, permitting the builder ample variety of construction and operation within his individual capabilities. Two such layouts are presented this month by the Layout Doctor, providing good operating potentials at moderate cost.

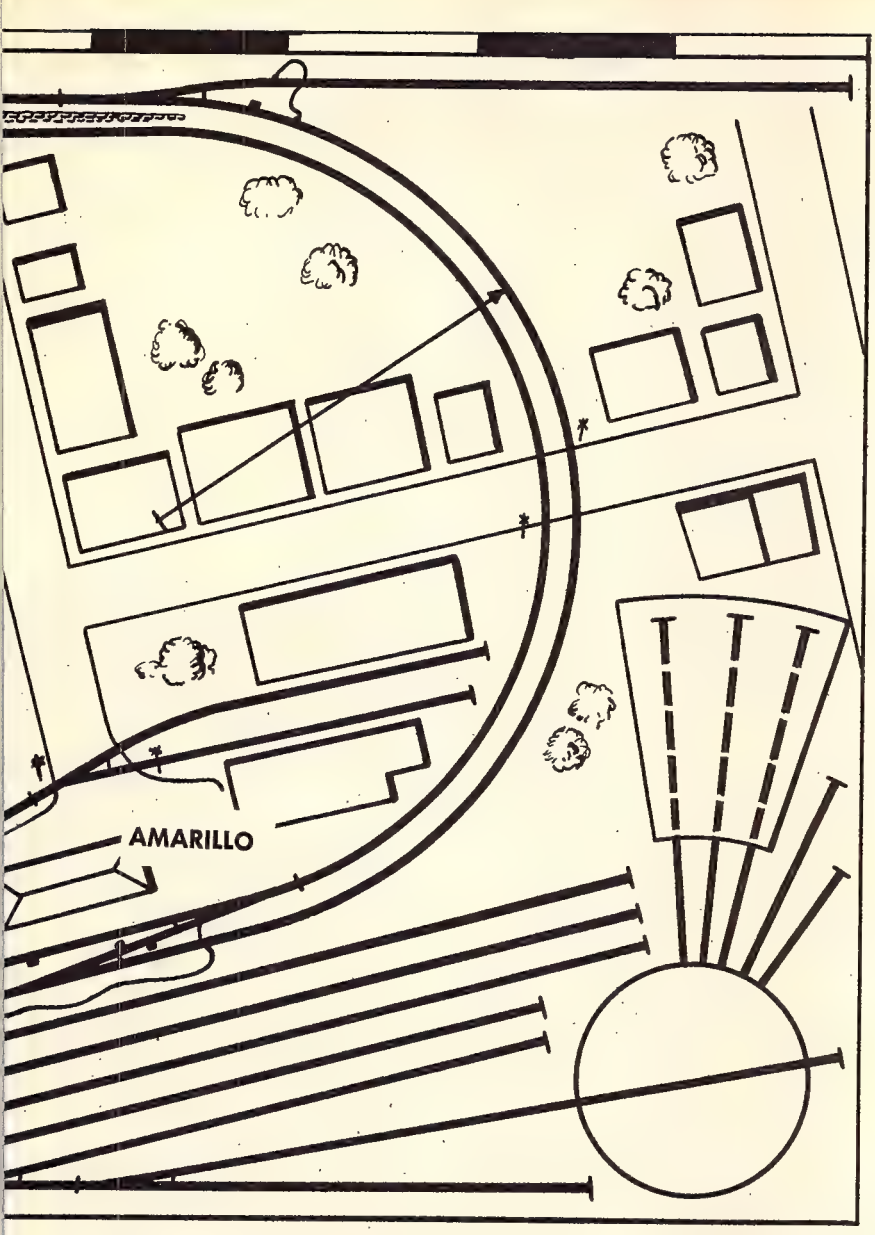


TEXAS, COLORADO & SANTA FE RAILROAD

and the natural place for this would be at Looville. However the straight stretch is so short there that it hardly seems worth while unless you prolong the siding by using a curved switch at either or both ends.

There is a branch line connecting at Looville. This rounds 16" radius curves and climbs 1:36 to a switchback at the altitude of 7" above **see-level.** Since the yards prevent showing the mine this serves, the mine is thought to be off beyond the tunnel which runs into the triangular emergency access space in the upper right-hand-corner. If your space permits you could continue the branch above or in back of the diesel house and the enginehouse to a mining area below the lower right corner of the drawing. The thought may occur to you as it has to me that the branch line would make a good little narrow gauge railroad, though of course a few additional facilities would be required at Looville, to be worked by the narrow gauge operator who would sit in the narrow access space in the center of the table. If the line were extended to lower right, perhaps engine facilities, etc. could be worked in on that as yet unmapped table.

Electrically the Little Miami is very simple. There are just three control sections, of which C, the branch line would be the last one added so that two is all you need worry about initially if you are leery of wiring. A is the yard lead oval with yard, and B is the main line. It might prove desirable to have each grade on a separate control so that if you wanted to add D at any time (not shown) you would simply have to put gaps in both rails at Looville and feeders at Cincinnati.



HO Gage 6x12 Ft.

The **Texas, Colorado, & Santa Fe** is for HO size 6 x 12 feet, with left side and back against walls. Actually if the right end also had to be against a wall, then you would have to eliminate the industry switch at upper right, or make a portion of the town demountable to create an access hole to reach that switch.

The layout itself is but a variation of the Little Miami, but two feet narrower, for a rectangular table. Your yard lead oval with wide curves and No. 6 switches is there, circling the table on the level. Your main line is there, climbing and falling both ways on 1:36 grades, and the branch line is there. The scenery works out a little different, with no river valley to unify the upper and lower levels, but that leaves more space for a town of some consequence. Electrical remarks on the L.M.R.R. apply equally to this pike, so similar are they in design.

If the turntable were moved off the main table or eliminated altogether in favor of a parallel track diesel house in the "service track" area, then the yard body tracks could be extended enough to hold another dozen freight cars. The right half-oval of yard lead and main line could also be moved to the extreme right of the plan giving a little more running room. Again, if things were left as they are and the turntable eliminated or moved, the platform could be made 11 feet long, maybe a little less, instead of 12.

Notice that on both these pikes, the main lines are single track but that two trains can be operated at once by running one on the yard lead or in the yard. Indeed a third can be operated at the same time on the branch line.

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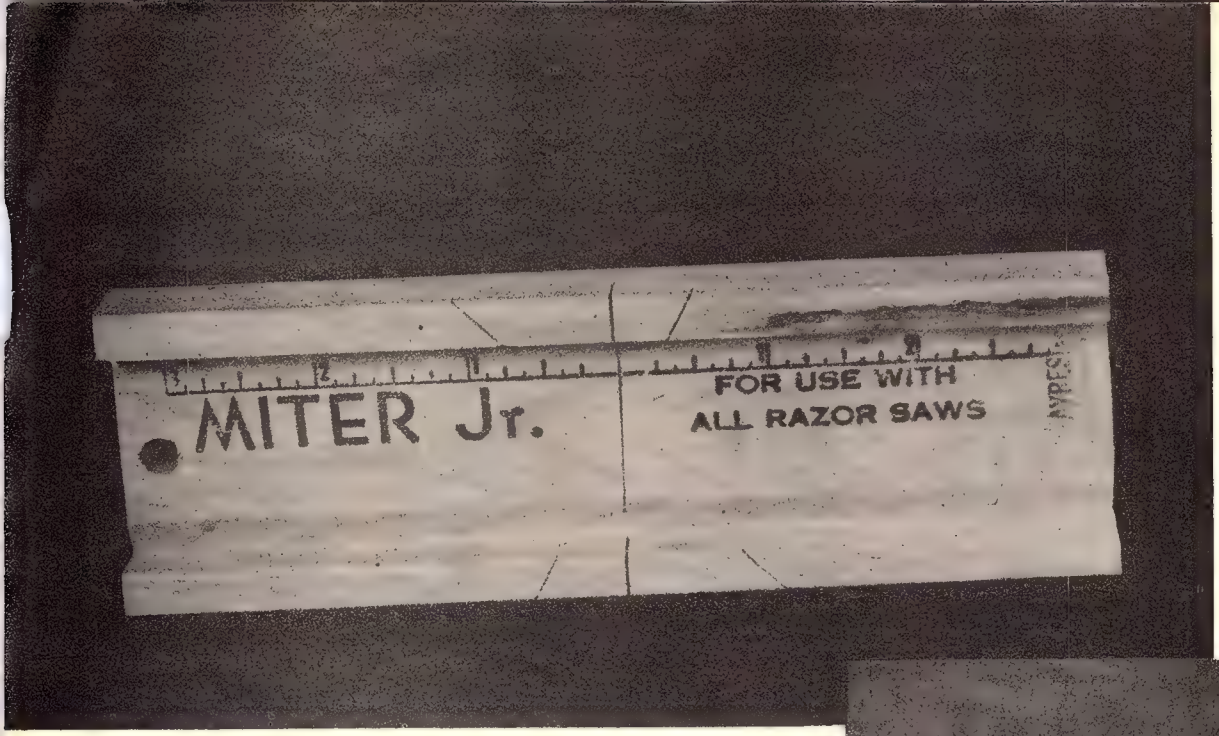
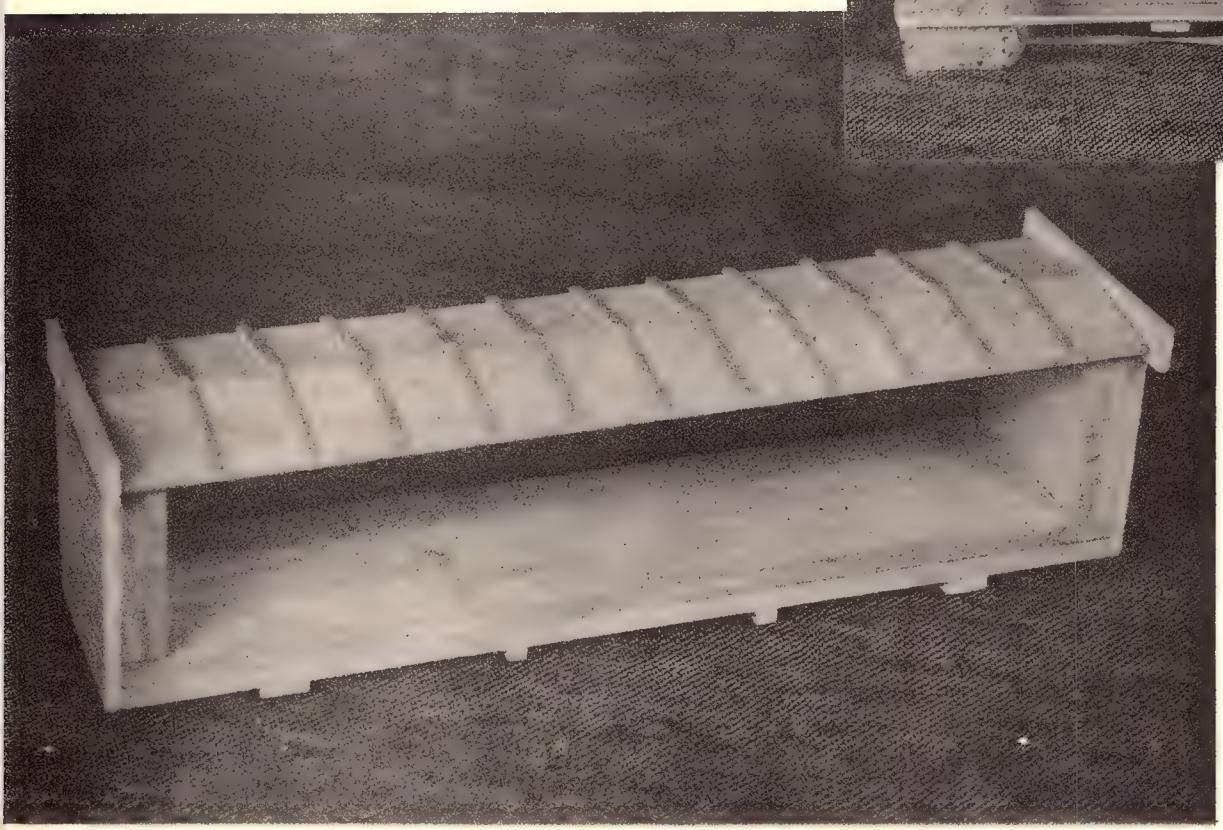


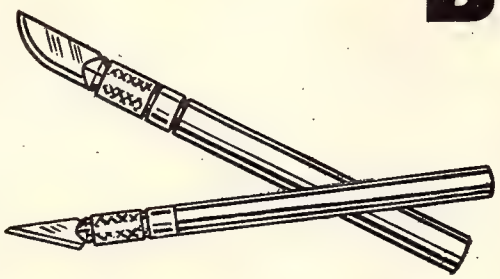
ABOVE — Photo I shows the new Tru-Scale Miter Jr., redesigned so as to accept full HO width body parts. Inch measurements have also been added, increasing accuracy in the cutting of small work. Razor saw blade fits the slots, permits precision cutting of all small wood work.

RIGHT — Photo II reveals proper method of applying scribed sheathing to car ends so that it dries flat and secure. Rubber bands hold end blocks firmly in place over sheathing until cement has dried thoroughly.

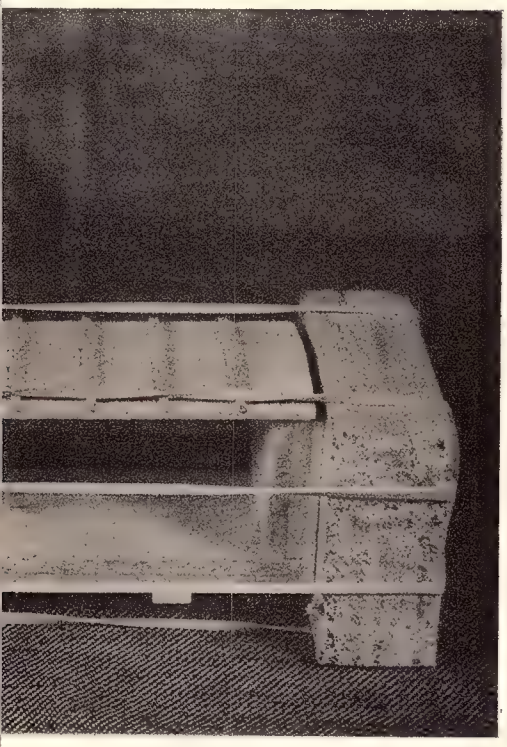
BELOW — After end sheathing has dried, rubber band clamps are removed and two pieces of stripwood are cemented in place as shown. Strips must be same thickness as sheathing. Strips must dry thoroughly.



completing the basic BOX CAR BODY



by Jim Corrick



Foreword

BEFORE continuing with the building of our basic box car body, a "prelude" is in order.

In the first article of this series (RMC, January 1957) the Ayres miter box was recommended in the cutting of the Northeastern precision cut wood. In discussing sawing of roof and floor stock the statement was made that TT stock would fit **inside** the miter box but that stock for all other gages was too wide.

Since then, Tru-Scale (who now manufacture the Ayres line) has increased the width of Miter Jr. to approximately 1½"—more than wide enough to accommodate HO stock.

Photo I shows the new size Miter Jr. Notice that the new model not only is wider but has a scale printed on the inside floor so that short measurements can be made without marking or using a ruler.

It's certainly a welcome improvement for the thousands of scratch builders and makes the use of precision cut wood even easier for the HOer.

Now to get back to the specific project of this series!

This session we'll complete the basic body by covering the ends with sheathing and stripwood, and by attaching the roof walk and roof end walks to the roof.

The ends will be done first by adding scribed sheathing and stripwood to the right places and in the right sizes.

Take a look at Figure I. The area enclosed by the dotted lines will be covered by a single piece of scribed sheathing with the scribed lines horizontal to the roof and floor. Two pieces are cut, one for each end, of a size and shape to be perfectly square at lines AB and CD and extend approximately 1/32" beyond lines AC and BD. (Don't worry too much about that 1/32". The important thing is to have the sheathing pieces exact at top and bottom but extending slightly beyond the sides).

For these end pieces, the following sizes will do:

For TT gage—1/32" thick with scribed lines 1/16" apart.
For HO gage—1/32" thick with scribed lines 3/32" apart.
For S gage—1/16" thick with scribed lines 1/8" apart.
For O gage—1/16" thick with scribed lines 1/4" apart.

The sheathing is marked using ruler, square and drawing pencil. The end pieces are cut using a thick metal ruler and sharp modeler's knife. (Better review cutting of scribed sheathing in the last article).

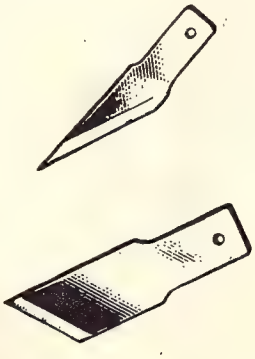
Cementing is done much the same as described in previous articles—with a good model cement and round toothpicks. However, because a larger surface is involved and there will be a tendency for the sheathing to curl, drying will be done "under pressure". That is, once attached, the end pieces will be kept under an even pressure until the cement is dry. (This, incidently, is a procedure which must always be used when cementing scribed sheathing).

There are numerous ways of doing this (standing the body on one end with a fairly heavy weight on the other is one way) but Photo II shows a better method, and one which probably has the widest application. Notice that the end pieces are held under pressure through the use of rubber bands and wooden blocks. The wooden blocks aren't absolutely necessary but are recommended since they protect the edges of the sheathing from the rubber bands. They also distribute the pressure of the bands over the surfaces to be cemented together.

After the cement has dried thoroughly (don't be in a hurry) the edges of the sheathing are trimmed until they are flush with the sides of the car.

This can be done by cutting with a knife or sanding with fine sandpaper, but the best way is to use a small file. A file is more accurate for this type of work, and being narrow can be used in tight corners and on small areas. All filing is done with the file perpendicular to the sides—a slanted file will bevel the filed edges.

Filing is done slowly and continued



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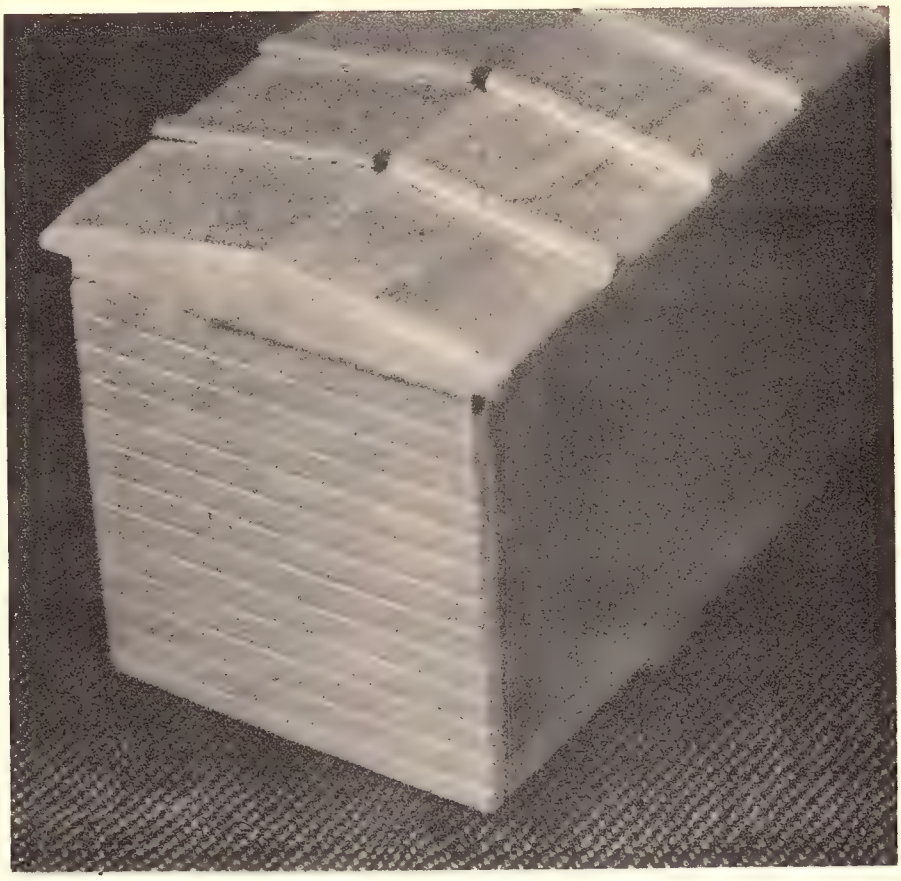
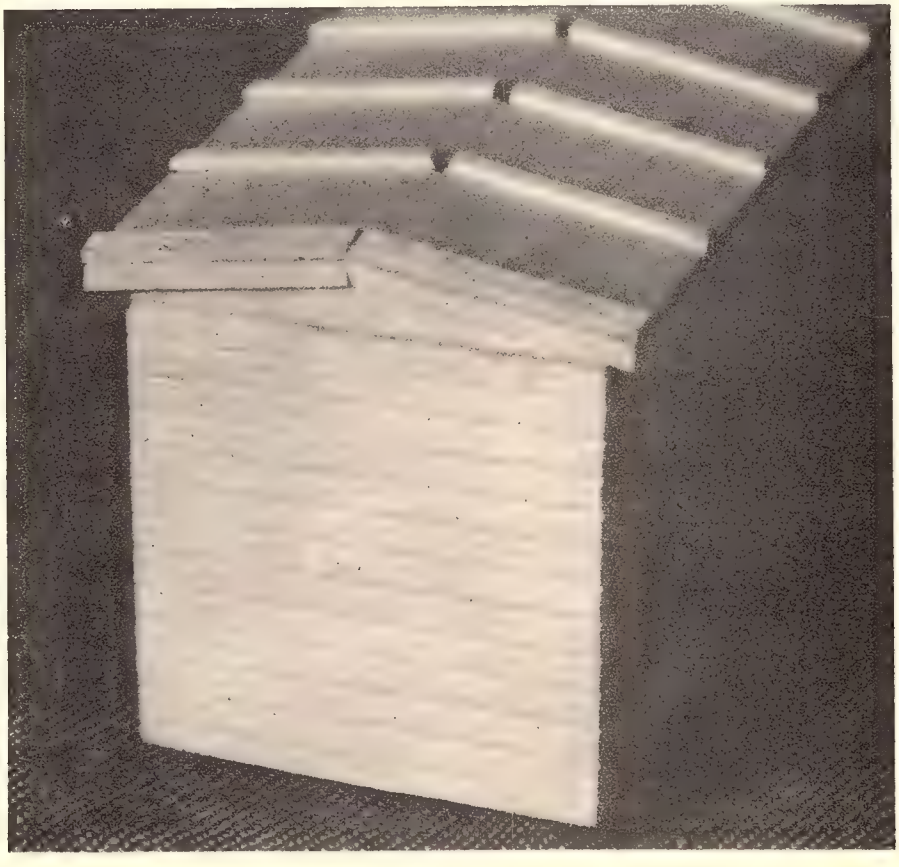
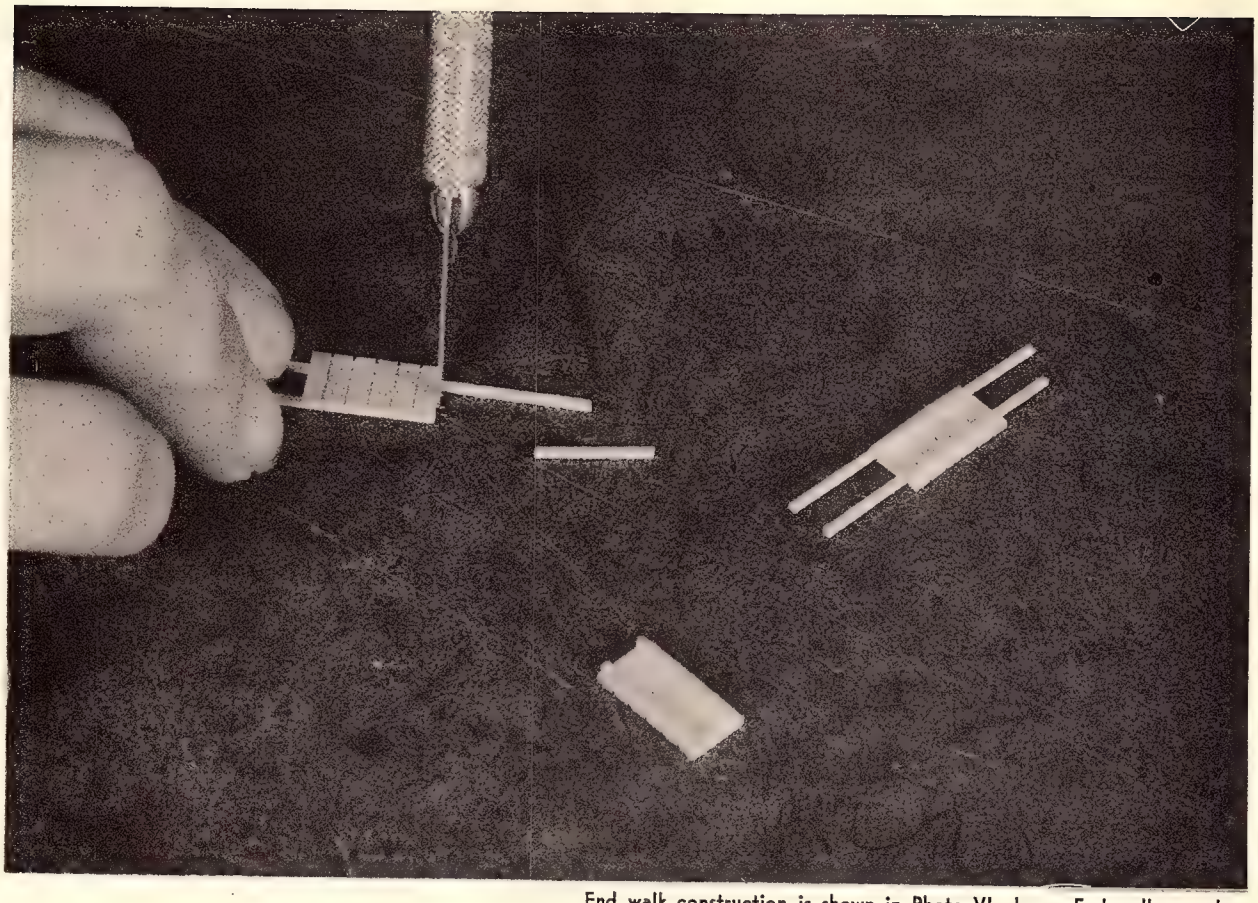


Photo IV shows how stripwood is first cut to rough shape with a modelers knife, then filed carefully to the contour of the roof section.



Trim has been added in Photo V, which completes basic wood work on ends, roof, and underbody. Refer to previous issues for description of the body, roof ribs, and underbody. No special tools are required.



End walk construction is shown in Photo VI above. End walks can be cut from scrap sheathing; are also sold in packages of 12 cut to exact shape. Cement strips to underside as shown, then cement in place diagonally opposite each other, in right hand corner of roof.

until the edge of the sheathing is completely smooth and even. (And don't neglect to dust off the kitchen table after the filing is finished; this advice, of course, is only for those who don't do their filing, sandpapering, etc., on the new living-room rug!)

After the sheathing is attached, the "exposed" roof ends are covered with a section of stripwood. For this, the stripwood must be as thick as the sheathing, as long as the roof is wide and as wide as the roof is high at the peak. The stripwood is cemented square with the scribed sheathing at line AB (Figure 1) to the ends of the roof. During drying of the cement, pressure is applied with wood blocks and rubber bands in the same manner as for the sheathing.

(All of which is a rather complicated way of saying get two pieces of stripwood, of the same thickness as the sheathing, and wide and long enough to cover the two ends of the roof.)

Photo III shows the stripwood cemented in place and illustrates what is meant.

When this latest cementing job is completely dry, the overhang is cut and filed until the stripwood has been given the exact shape of the roof.

To do this, the end is held against a hard, flat surface and the overhang is cut roughly to shape. Final shaping is done with the file so that all edges of the stripwood are smooth and even with the contour of the roof (Photo IV).

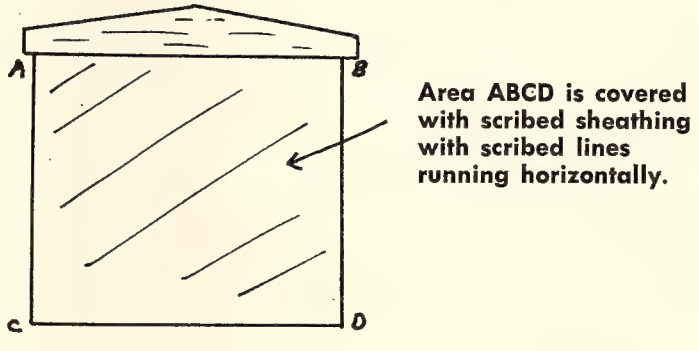


FIG. I

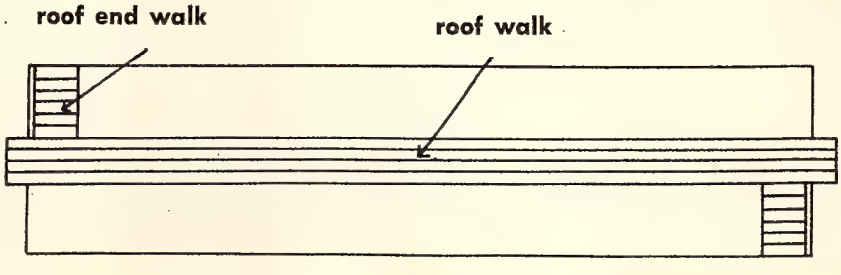


FIG. II

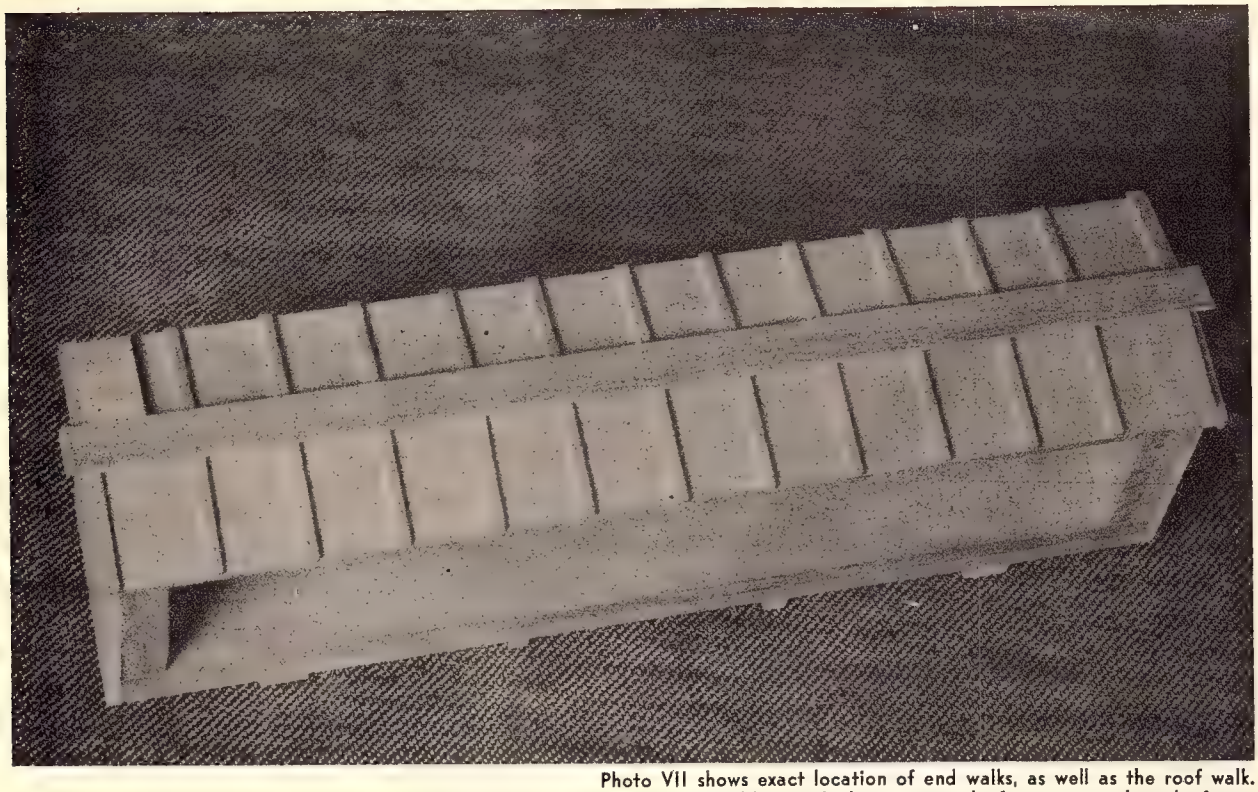


Photo VII shows exact location of end walks, as well as the roof walk. Roof walk should extend about one scale foot past each end of car.

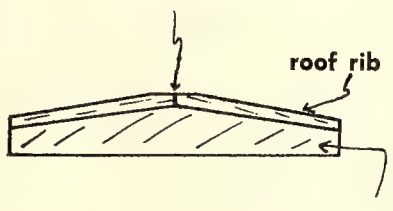


FIG. III

cross section at roof at roof rib

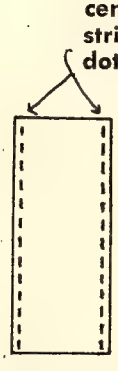


FIG. IV

underside of roof end walk

NOTE: Drawings illustrate method only and are not drawn to scale.

Covering of the ends is finished with the addition of trim. (Photo V shows where this trim is added). Recommended sizes are:

TT and HO gages —
1/32" x 1/16".
S gage —
1/32" x 1/16" for trim on the ends
1/32" x 1/8" for trim on the roof.
O gage —
1/32" x 1/8" for trim on the ends
1/32" x 1/4" for trim on the roof.

So much for the ends; now let's do some work on the roof.

For this we'll need a section of roof walk stock and two roof end walks. These are both manufactured by Northeastern and are available to scale for all four gages. Roof walk stock comes in two foot lengths and is cut to proper length. The end walks, sold in lots of a dozen per package, come in the correct length and width and are used "as is".

Figure 2 is a bird's eye view of the roof and shows the location of the roof walk and end walks. (The roof ribs aren't shown since they're unneeded detail for this.)

Notice that the roof walk extends beyond the ends of the roof. One scale foot is a good length for this extension —which means that the total length of the roof walk will be the length of the roof plus two scale feet. (i.e., 42 scale feet for a 40' box car.)

The correct length is cut off the roof walk stock, using miter box and razor saw, and cemented to the roof.

Before cementing, take a look at Figure 3. This represents a cross section of the roof at one of the roof ribs and shows a small flat area filed at the spot where the roof walk will touch and be cemented. These flat areas are filed at the "peak" of all roof ribs (also the trim at the ends of the roof) and provide a surface on which the walk will seat even and level.

The roof walk is cemented in place by placing a daub of cement on each of these filed surfaces. The walk is put in place, lined up by eye (making sure the extension past the ends of the roof are equal) and held in place with rubber bands until the cement is dry.

Next the two roof walks are cemented to the roof. (Take another look at Figure 2). But first, since roof walks are raised and not fastened directly to the roof, two lengths of 1/32" x 1/32" stripwood are cemented to the underside of each walk. In illustration, Figure 4 shows the location of these strips; and Photo VI shows an easy method of cementing and trimming without bother of accurate measuring.

Photo VII shows our basic box car body as completed to date.

Postscript

Since we started this article with a forward, its only natural that we end with a postscript.

So far in this series, we have been discussing a basic car body, not patterned after any specific type of car. Now we approach the time when we start adding details.

Future articles in this series will make reference to the new **RMC Rolling Stock Manual,** in which will be found many plans of old and new cars. You'll find it an excellent reference with the plans specially chosen for easy modeling.

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LIONEL ENTERS THE HO MARKET

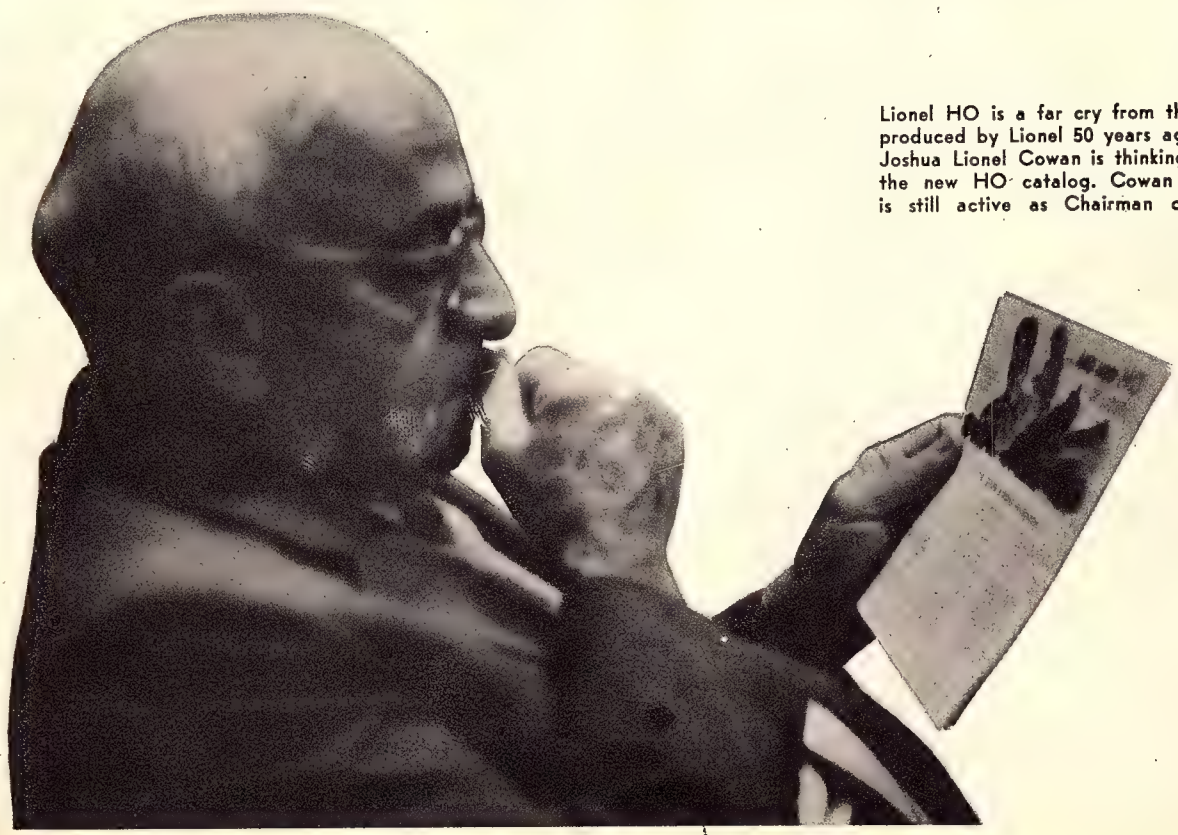
Exclusive RAILROAD MODEL CRAFTSMAN interview with top Lionel executives answers

- **Why Lionel has entered the HO train set field.**
- **Is Lionel in HO to stay?**
- **Who will handle Lionel HO?**
- **What is Lionel HO?**
- **How big a market does Lionel hope to capture?**
- **How will Lionel's move affect the scale model railroad industry?**
- **How will this affect Lionel's O and O-27 market?**

AS the trend in HO has grown stronger and stronger towards ready to run train sets, there has been increasing wonderment in both trade and consumer circles as to what Lionel would do. Would the trend in the Americas follow the pattern set in Europe: Standard gauge to O gauge and then to HO gauge. Would perhaps Lionel reintroduce their pre-war OO gauge line. If Lionel would go into HO, what would their line consist of?

Questions such as these have been kicked around trade shows, model clubs, and wherever two or more model rails have gathered, for the past four years. As late as the March 1957 New York Toy Fair, Lionel had still not exhibited any HO and it seemed as though another year would pass before a new HO line could be introduced. Then in quick succession came a news release that Mr. Alan Ginsberg, Lionel V. P. in charge of sales had made a trip to Italy, followed quickly by a flood of new rumors that Lionel had a line ready for release. Then came official word that the Lionel Corporation, in cooperation with the Italian firm of Rivarossi, would release a complete line of HO train sets for the 1957 season.

To get the complete inside story on how Lionel expects to fit into the HO picture, RAILROAD MODEL



Lionel HO is a far cry from the early trains produced by Lionel 50 years ago, as perhaps Joshua Lionel Cowan is thinking as he scans the new HO catalog. Cowan Senior at 80 is still active as Chairman of the Board.

staff photos

Alan Ginsberg: "Lionel HO is aimed at more mature boys, and the adult hobbyists."

CRAFTSMAN interviewed Mr. Ginsberg and also talked with Lawrence Cowan, Lionel President, and with Joshua Lionel Cowan, Chairman of the board and founder of the Lionel Corporation.

HHC: When will Lionel HO become available in hobby shops?
Mr. Ginsberg: In early August.
HHC: Where will hobbyists be able to get Lionel HO?
Mr. Ginsberg: Lionel HO will be available from hobby shops, department and hardware stores, and toy stores.
CAP: How will Lionel distribute their HO line?
Mr. Ginsberg: Lionel had to start their HO distribution through their own regular distributors since there isn't enough Lionel HO available for the 1957 season to also permit distribution through hobby distributors.
CAP: How will the hobby dealer get Lionel HO?
Mr. Ginsberg: Many hobby dealers now buy from Lionel toy wholesalers. No hobby dealer has far to go to get Lionel HO. Any wholesaler who has been carrying our regular line can also get our HO.
HHC: What about your service stations?
Mr. Ginsberg: Our HO line is available directly to our retail service stations on the same pricing setup as our O gauge lines.

HHC: How long has Lionel been studying the HO field?
Mr. Ginsberg: We have been studying the HO scale model field for over four years. There was much misleading data and it took time to get accurate information.
CAP: Then your entry into HO isn't just a trial balloon?
Mr. Ginsberg: Our engineering department is in HO with both feet.
HHC: Why did you pick Rivarossi to work with on your HO?

Lionel President Lawrence Cowan inspects the new HO line aimed at the hobby market.

Alan Ginsberg, Vice President in charge of sales, sees no conflict between HO-O lines.

Lawrence Cowan: "We've performed amazing tests."

Mr. Ginsberg: We could have gone into HO in a dozen different ways. We chose Rivarossi because of their product. Our engineering department has conducted amazing tests with it.

HHC: What of the future?

Mr. Ginsberg: Our 1958 development work is in full swing.

CAP: Has the trend toward smaller homes affected your entry into HO any?

Mr. Ginsberg: No. O gauge need not take any more room than HO.

HHC: What reasons prompted Lionel entry into HO?

Mr. Ginsberg: There are two reasons. (1), Objective evidence of increasing consumer interest. (2), It is a different market than the boy market.

HHC: How do your HO and O gauge lines differ?

Mr. Ginsberg: HO, as we see it, is for the permanent hobbyist. As for the boy's market, HO cannot be as dominant as O for play value. HO is for older, more skillful boys and the mature hobbyist.

HHC: What will Lionel HO mean to you and the industry?

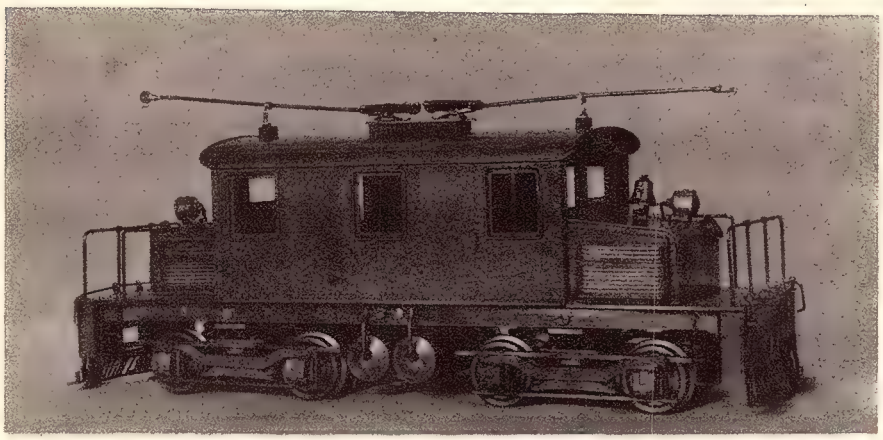
Mr. Ginsberg: Our entry will represent substantial total increases in HO sales, through the attraction of new customers. We believe that HO is plus business. This in turn should attract more plus business for the industry.

CAP: What will happen to the present ready to run manufacturers?

Mr. Ginsberg: I think that any manufacturer who comes up with an element of superiority can do a good job. If Lionel couldn't have come up without enough elements of superiority in our HO product, we'd have been foolish to enter the field.

NOTE: Lionel estimates retail HO sales for the 1957 season at between 1.5 and 2 million dollars.

TEST TRACK



Kidder 60 Ton Electric Locomotive

60 Ton BLW Elec. Loco (HO)
Ken Kidder
Box 213, San Francisco, Calif.
Price: $19.95

Kidder's Japanese import of the Baldwin 60 ton steeplecab electric is the smallest such type yet to be made available in HO (There is also an 80 ton CSS&SB loco available from another importer). Sides and ends are engraved in heavy brass. The model is built up entirely of brass sheet except for some cast lead tanks underneath which also add some weight. The model hits the scales at a fraction over 9 ounces, since there is also another lead weight inside the cab.

The locomotive operates on standard 2-rail track. Two trolley poles mounted on the roof are insulated from the body, should the modeler desire overhead trolley wire operation. Some modelers may desire a bit more spring tension in the poles, an easy job of merely soldering in new springs in the trolley pole base. However, it isn't necessary as the poles have enough tension for good wire operation.

The motor is mounted vertically and connects to one axle through a worm and gear, with a spring wire belt also driving the other set of wheels on the same truck. The trolley runs surprisingly quiet and very smoothly. We had her running around with five cars with absolutely no strain. Power-wise, she drew a little over 1 amp. Headlights work.

Couplers provided are AAR type dummies. The brass floor will accept a plastic draft gear box with a little cutting down of the box, providing an insulated coupler if it is needed.

Appearance of the loco is excellent and we suspect that this will be a popular engine among the traction fraternity. This type locomotive was widely used on trolley freight lines, and also saw use on some steam type lines which operated electric divisions.

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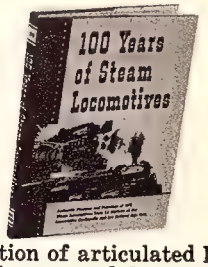

One Hundred Years of Steam Locomotives provides the railroad hobbyist with authentic lore out of the past, not to be gained from any other single source. Most of the specimens, indeed, are not to be found except in their old, very scarce cyclopedia origins. Lavishly accompanied by photographs, the plans found in this book are designed so that the model builder can construct his own scale models from the full and complete information given, whether his interest lies in the *Thomas Rogers* of 1856, the Union Pacific behemoth *Big Boy* of the recent 40's, whether in the choicest models of the most typical of wheel arrangements or in the experimental models of rare types of wheel arrangements.

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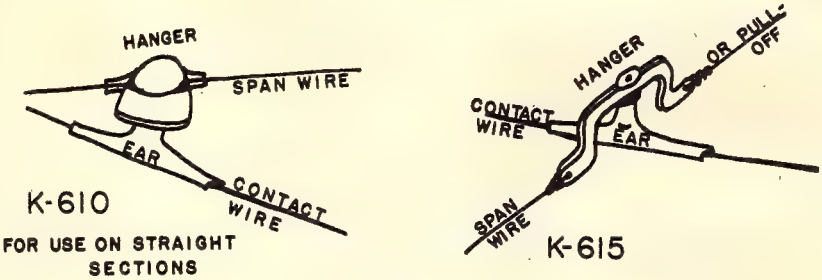

Wagner Trolley Hangers

model enthusiast, is the matter of stringing wire. Up until now, trolley wire has always been suspended from either poles or wire by means of tiny wire brackets which had to be fashioned by hand. Although the modeler eventually was able to acquire a knack in getting these in place, there was a definite need for commercially made brackets more nearly like the prototype. These brackets are now available from Wagner Car Company, scaled for O gage but suitable for all gages, since they are as small as the usual hand made hanger in HO anyway.

The brackets are lost wax castings and need no further cleaning. They are in two types: K-610 for use on straight sections, and K-615 for use on any curve.

Type K-610 slips over the span wire, is soldered in place, after which the trolley wire is held against the cast in groove and soldered. It is necessary to pre-tin the hanger and later to clean the wire free of solder and flux or grease.

Type K-615 is used on curves and is provided with two tiny eyelets for insertion of the span wire and pull off wire. If desired, one ear of the K-615 may be clipped off if it is not needed.

The hangers were made from patterns designed by Bill Clouser, well known trolley modeler, and were made especially for Wagner Car Co. by Kemtron. Quality is excellent.

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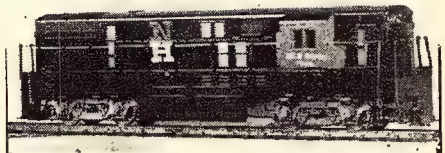

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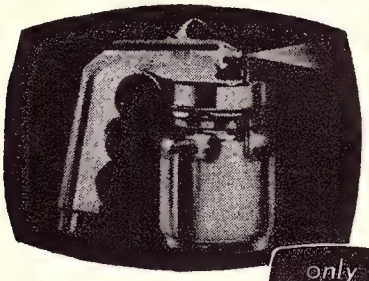

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MODEL RAILROAD TIMETABLE

COMING EVENTS and **NEW CLUB** listings for this column are welcome. Use club letterhead and be sure to give name and address of person to whom inquiries may be directed. Items for inclusion in the December issue must be at Ramsey, N. J. by Sept. 25th. Items for inclusion in the January issue must be at Ramsey by October 25th.

COMING EVENTS

JACKSON, MICHIGAN: Sept. 21-22. NMRA North Central Region fall convention. Headquarters, Hotel Hayes, Registration starts 7 PM Sept. 20th. Tours of layouts, ladies events, banquet, clinics, etc. Full data from: Robert Preston, 4650 Draper Road, Vandercook Lake, Jackson, Mich.

NEW YORK CITY, N. Y.: Sept. 27. Northeastern Region NMRA Metropolitan District meeting, Con Edison Building, 14th St., New York City. A lecture, slides, and models of railroad equipment before 1900 and after 1950 will be featured. Prizes given for best models in eras mentioned. T. "Kin" Salmon, Publicity, 44 Park Ave., Yonkers, N. Y.

CLEVELAND, OHIO: Oct. 5-6. Mid Central Region, NMRA fall convention, headquarters Hotel Cleveland. Registration starts 7 PM Oct. 4. Saturday boat and rapid transit system trips. Also clinics, slides, breakfast, contests, drawbar testing. Full data from Cleveland Council Of Model RR Clubs, 13148 Lorenzo Ave., Cleveland 20, Ohio, Arthur A. Finke, Cecy.

ALBANY, NEW YORK: Oct. 12-13. Northeastern Region NMRA Fall Convention, at Hotel Ten Eyck. Fan trip to NYC Selkirk Yard with inspection NYC 4-4-0 No. 999. Full convention program of movies, contests, clinics, displays, and banquet. Further data from: D. A. Finnegan, 24 Holly Lane, Latham, N. Y.

New Clubs

YOUNGSTOWN, OHIO: Youngstown Model RR Assn., HO, organized in March, has 16 members, wants 9 more, over age 25 only. Meets Tuesday 7:30 PM. Contact R. E. Folsom, PL-54940 or Dave Craig, RI-37871. 607 Oak Hill Ave., Youngstown, Ohio.

MANCHESTER, CONN.: Conn. Society of Ferroequinologists & Model Railway Engineers wants members, operates 11x15 Gargraves layout (we assume inside 3rd rail. Ed.) Meet Sunday 7-9 PM. Jon S. Steele, Pres., 199 Porter St., Manchester, Conn.

ATTENTION: CLUB PUBLICITY MEN: Items for this column are taken only from letters sent specifically to this department, not from club bulletins.

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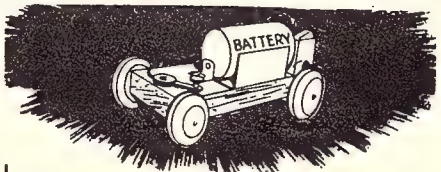

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TROUBLE SHOOTING

Gage

Q. I know that "gage" is the width of railroad track, but is this measured to the insides of the rails, the rail centers, or what?

A. Gage is measured from the inside of one rail to the inside of the other running rail, and so is the shortest possible distance between these two rails.

Standard Gage

Q. What is standard gage?

A. Standard gage could refer to two different things. Normally we think of standard gage as being that gage of track used by the real or prototype railroads which measures 4 ft., 8½ inches. However, it could also refer to a toy train track gage measuring 2⅛ inches which was popular up until about 1935. Today it is almost entirely a collectors item.

Narrow Gage

Q. What is narrow gage?

A. During the last years of the 19th Century, many railroads were built to a gage narrower than the 4 ft., 8½ inches of standard gage track. The most popular of these was 3 foot gage and some 3 foot trackage can still be found in Colorado and on some logging roads. 2 ft. gage was also popular for a while, especially in the Maine area, but the last of these stopped running as a common carrier around 1940. Some 2 ft. gage equipment can be found today on the Edaville RR, at South Carver, Mass. Most of this equipment was formerly in use on the Maine narrow gage lines.

Lighter Rail

Q. What rail should I use on a branch line?

A. Branch lines, yards, trolley lines, and industrial spurs normally use lighter rail than is required for a busy main line. The following recommendations are commonly used:

Code 125 — S and O gage secondary lines
Code 100 — OO and S gage secondary lines
Code 70 — HOn and old time HO lines

Rail Scales

Q. How do the different rail codes scale out, roughly:

A. The different codes scale as follows when used in different gages:

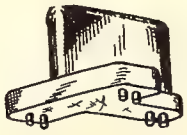
Code 172 O Gage — 152 lb.
Code 125 O Gage — 90 lb.
Code 100 HO Gage — 152 lb.
Code 70 HO Gage — 90 lb.

Rail Sizes

Q. What sizes and types of rail are used in scale model railroading?

A. All rail used in the United States is flat bottom rail. The popular sized rails presently used are:

Code 172 — .172" high
Code 125 — .125" high
Code 100 — .100" high
Code 70 — .070" high



Track Gage

Q. What is a track gage?

A. A track gage is a device which can be used two ways: (1) to check the distance between rails, and (2) to hold rails the proper distance apart while they are being laid. The best kind of track gage for laying track is the triangular type which has two points on one side holding the rail, and one on the other. For checking track gage, only two points are necessary, one on each rail.

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Gages

Q. What are the various gages used in model railroading?

A. In order of size they are as follows for the standard gages:

O Gage — 1¼"
S Gage — ⅞"
OO Gage — 19mm.
HO Gage — 16.5mm.
TT Gage — .471"

Other Gages

Q. Are there other model gages?

A. There are certain other gages which are beyond the normal scope of this publication and are of primary concern to either collectors or outdoor fans. They are:

No. 1 Gage (⅜" Scale) — 1¾"
Standard Gage (7/32") — 2⅛"
¾" scale live steam — 3½"
1" scale live steam — 5"
1½" scale live steam — 7½"

There are other gages but spaces precludes listing them all.

What Rail To Use?

Q. What Code rail should I use in my gage?

A. It is possible to correctly use several of the above size rails in any one gage, just as the real railroads use different sized rails. However, the following is generally accepted as standard:

Code 172 — O gage
Code 125 — S and OO gage
Code 100 — HO gage

Rail Material

Q. What is rail made from?

A. Most model rail is drawn from brass, but there is also rail made of steel, and nickel silver. Occasionally you will run across a layout having aluminum rail (usually in O gage) and a few HO pikes may still be using wartime zinc rail.

Best Rail?

Q. What are the advantages of the different rails?

A. Brass has proven the most popular so far because it is easily worked and as a result can be sold more cheaply, especially when made into switches and other special track forms. Brass will not rust, is easily filed and soldered, and also bends easily. More expensive is nickel silver rail which has the added virtue of more realistic appearance. However, at this time, nickel silver has not as yet come into widespread use. Steel rail is preferred by some because of its greatest realism to the real thing and because some feel it provides better traction than the more slippery brass rail. Steel is also subject to rust and is therefore used mostly by O gagers where the heavy weight of locomotives can keep rust problems to a minimum.

Gage On Curves

Q. Why must the gage of curves be widened and how do you do it?

A. Long wheelbase trucks and locomotives tend to be wider than the track gage on curves, and to avoid binding with consequent derailments, track is often widened very slightly on curves. The common triangular track gages sold compute this automatically.

Gage Faults

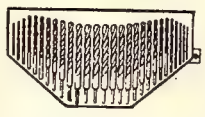
Q. What happens on poorly laid track?

A. When track is too narrow, the wheels tend to ride up on the rail head, hopping off the track and causing a derailment. Conversely, when track is too narrow, wheels drop down off the track onto the ties and either wedge themselves in or hop off, again causing a derailment. Well laid track is a must for good operation. As a result, many modelers use sectional track or flexible track to assure good operation, rather than to try and lay their own.

Next Month—

Trouble Shooting answers many of the questions to those perplexing trackwork problems.

Chrome Vanadium 29 Pc. Drill Set



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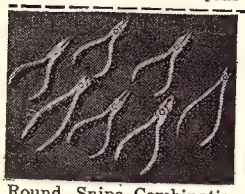

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ATTENTION DEALERS, COLLECTORS, SPECIALTY MANUFACTURERS, AND OTHERS who do not qualify for free Swapper Ads. Now you can benefit from the tremendous drawing power of the RMC Swapper Column by placing your ad here in the Commercial section. Rates, payable in advance: 20c per word. Count each initial as a word. Zone number free. Commercial ads for the September issue closes on June 3rd. Ads received later will be inserted in the October issue.

PASSES EXCHANGED

PHILLY CENTRAL RAILROAD: Bill Janklow, 7424 Frankford Ave., Philadelphia 36, Penna.

DRY RUN SHORT LINE RR CO: Robert H. Schmidt, 1949 Lehigh St., Easton, Pa.

BROOKLYN EASTERN O-GAUGE: Ben Smith, 265 Tompkins Ave., Brooklyn 16, N. Y.

TITFIELD & TORONTO RAILROAD & BRANCHES: Curt Montgomery, 283 Brantwood Rd., Snyder 26, N. Y.

DELAWARE & RARITAN VALLEY RAILROAD: Stan Trzoniec, 2237 Elizabeth Ave., Scotch Plains, N. J.

SWAPPERS

FOR SALE: Hobbyline set No. 420 and power pack excel., $25. Ideal farm set, Plasticville postoffice, scratch-built old-time frt. sta., $2.50. Lloyd Picker, 2844 East Edison St., Tucson, Ariz.

FOR SALE: Fleischmann 0-6-0, 2 Fleischmann Pullmans, baggage. 2 Athearn coaches; observation. Atlas snap track, 15" & 18". 2 L. H. switches, track. Also large collection of *RMC*, MR, MT. Sam Ainsworth, 428 Maple, Camden, Ark.

SELL OR TRADE: 30 steam loco mechanical dept. diagrams. SP 116 negatives, 3½ x 5¾" prints, back issues of *RMC*. Need O ga. scale cars, trucks and wheels; loco, car blueprints, plans. Herbert Cearley, 706 West Caldwell, Compton, Calif.

WANTED: Interurban Special No. 9 "Sacramento Northern Railroad" by Ira Swett. Good cond. Please state condition. Frederic E. Smith, 161 Crestwood Dr., Apt. 9, Daly City, Calif.

TRADE: Athearn S. F. four unit diesel. All units gear driven, dual drive. Want Bowser, Varney, Penn Line steam engines. William L. Mansir, 138A Loma Vista, El Segundo, Calif.

WANTED: HO trucks and/or parts. Also small lathe of 3" swing. E. S. Cook, 921 Russ St., Eureka. Calif.

WANTED: Marklin Trains. O and HO ga., discontinued items. Catalogs prior to 1953. Give cat. No. or description, cond. and price. Pay cash or trade American HO RTR equip., Paul Frutzman, 1617 Skyline Drive, Fullerton, Calif.

SWAP: Have over 100 Mantua Couplers & 10 uncoupling ramps. Make offer in HO. Dr. G. Ehrlich, 251 Central Ave., Jersey City 7, N.J.

TRADE: Varney powered A unit; unpowered B unit, 2 Athearn belt driven diesel A units. New Tyco power pack. Separately or together for HO locos. All letters ans'd. Jim Roark, 1224 Viscano Dr., Glendale, Calif.

WANTED: Any old Marx, Lionel cars, 027—O. Love to fix—the worse the better. Send list. James Stilwell, 511 Gale Ave., Hawthorne, Calif.

FOR SALE: Lionel Hudson 773, Excel. cond., $75. O ga. M. S. Hostetler, 2310 So. Stimson Ave., LaPuente, Calif.

FOR SALE: Built HO Equip. Dockside and Casey Jones—both $25. Brass Hat Power Pack, Rheostat and Reversing Switch, $6. 10 cars, $15. Send money order. A. Iwamoto, 3454 E. 6th St., Los Angeles 23, Calif.

WANTED: Bowser Mountain HO—either kit or assembled in perf. cond. Edward Claffey, 2940 Devita Dr., Napa, Calif.

FOR SALE: Old American Flyer train, engine, coal car, 2 mail cars, 2 pass. and flat car. This is a rare model $25 or best offer. Larry Grabowski, 601 West "D" St., Ontario, Calif. (Age doesn't necessarily determine rarity. Ed.)

SELL OR TRADE: Live steam, NP Z6 4-6-6-4, ¼" scale, 31" long, 18 lb. Burns Propane gas, 35 lb. pop-orr. Remote control box car contains 6 & 12 volt motors operating throttle & reverse levers. Expert construction, perf. operation guaranteed. Worth $1000, make offer. J. W. Newton, 2334 State St., Santa Barbara, Calif.

WANTED: Used Gargraves track O ga. 3 rail. Reasonable. Quotations PPd. please. J. W. Gillam, 3216 W. 185th St., Torrance, Calif.

FOR SALE: 2 Fleischmann 1371 pass. diesels, retail value $19.95 ea. Take first offer over $22.50 or will swap against HO traction equip. M. Dawn, c/o 43 Center Dr., Old Greenwich, Conn.

FOR SALE: Marklin, HO scale locos, cars, stud track, switches, parts. HO kits, equip. Lawrence GP-7 $25. *Model Craftsman*, Railroaders, 1936 to date. HO Monthly cpl., $20. Allen Sharp, 100 Shennecossett Pkwy., Groton, Conn.

FOR SALE: Hobbytown Alco Pass. A-A, single power, Mantua Mike, Globe NYC freight A-B-A Lindsey powered. Varney Aerotrain 2 car Kemtron powered. All Perf. Cond. $100 takes lot. Al Shoneck, 185 Lewis Ave., Meriden, Conn.

SWAP: Good stamp album, over 5 years old, for a couple of trolleys or equip. for Lionel 027 train. No junk. Send list. Jack Mulholland, 139 Homestead Ave., Waterbury, Conn.

WANTED: Lionel and AF 0-6-0 switchers, Lionel 2900 and 700 series freights, all catalogs. Tom Johnson, 815 Olive St., E., Arlington Heights, Ill.

FOR SALE: AF loco and switcher, 15B trans., trkl, semaphore, RR trestle set, 2 pr. manual switches, and access. Stamp for list. Davis Dulzo, 239 Fox River Dr., Barrington, Ill.

SWAP: Model Railroad magazines, books. Large assortment HO cars, rheostats, relays, etc. Fishing tackle, Exakta, Rolleiflex camera, stamps. Want US stamps, coins, especially early Lincoln, Indian cents. Loidolt, 3811 Gunderson, Berwyn, Ill.

FOR SALE: TT: 5 powered diesels, MU: 7 dummys, trailers; 26 cars—kit to b. u.: miscellaneous: $45 or trade for 2 HP 2-8-0. List free. Don Schroth, Box 91, Blue Island, Ill.

FOR SALE OR TRADE: AF S ga., 2 locos, 35 frt. cars, 26 pass. cars, track, accessories. All unused. List for stamp. Want HO car & loco kits. John Lyko, 2721 S. Keeler, Chicago 23, Ill.

SELL OR TRADE: Lionel, AF, Ives, std. ga., including 3 pass. Ives all white 3243. Want HO esp. Varney steam power, Bowser Artic. switches and mach. John Roth, 4978 North Menard St., Chicago 30, Ill.

WANTED: Lionel Pullman set—new or excel. cond. only. Interested in other discontinued Lionel equip. and catalogs. Pay cash. John R. Russell III, 209 S. State St., Chicago 4, Ill.

WANTED: Buy any std. ga. item and live steam. Ives 3245 set, AF President's Special, Old trolleys, old 2 rail General Trains three car St, gauge set, and any old trains and toys made before 1930. Have for trade Dewey live steam boat. Bill Paul, 107 Richardt, Evansville, Ind.

TRADE: 3 ea. No. 4 L&R, 1 ea. No. 8 L&R Atlas turnouts, new. For Fleischmann switches. Several car kits, freight and passenger, Mantua trolley kit to trade. Clifford Dieter, 613 Melvenia, Indianapolis 19, Ind.

WANTED: Std. Lionel Bucyrus Erie Wrecking Crane, factory equipped with 6 wheel trucks & electromagnetic couplers. Built 5-6 years ago. State price. David H. Thompson, 2227 Pearson-Friley, Ames, Iowa

FOR SALE: HO ga. Model Railroad equipment in excel. cond., equipped with 6 wheel trucks & electromagnetic wheels, drivers and power trucks. Send stamp for list. Richard K. Peterson, 1234 Clay St., Topeka, Kan.

FOR SALE: Revell UP diesel switcher, $12. Mantua 0-4-0 Shifter Spray Painted (no lettering) with tender, $12.50. 5 Westchester Roundhouse stalls (kits) 50c ea. Westchester Monterey Frt. Station (kit) $1. F. E. Blackman, 6355 Bay Ridge Road, Jacksonville, Fla.

SWAP: Walthers Pugs 7701-7703-7704-7705 & 7708 (kits) plus old issues *RMC* & MRR for old time engine, cars, or Suydam bldg. kits—or, what have you to offer. Rudolph F. Borke, 2808 Greenlawn Rd., Baltimore 7, Md.

FOR SALE: HO "Little Six," brand new $9. HO Varney Diesel Switcher, almost new, $15. Jim Hammond, 6206 Maiden Lane, Bethesda, Md.

FOR SALE: Back issues magazines—*RAILROAD MODEL CRAFTSMAN*, Trains, *TOY TRAINS*, Model Builder and others. All good to excel. cond. Send stamp for list. Hilaire Marcil, 5 Hayer St., Adams, Mass.

SWAP: HO or cash for cactus phono needles (new or used) such as were made by Peter Grey, Decca, and others 7 or 8 years ago. G. B. Cave, Main St., Douglas, Mass.

FOR SALE: HO locos, tracks, pass. and frt. cars. Send for list. Also 5000 US and world stamps. Bill McGurk, 49 Holmes Rd., Pittsfield, Mass.

BUY, SELL OR SWAP: Tinplate collectors items, especially Ives. Swap new HO, Lionel, or AF for old tinplate. Visitors welcome. Ted Hindmarsh, 909 Southern Artery, Quincy 69, Mass.

WANTED. Famaco HO BB-1 Pennsy Electric Switcher in good shape and International Pennsy P5A streamlined electric in good shape. T.O.P. Speidel, 536 Revere Beach Blvd., Revere 51, Mass.

SELL OR TRADE: AF S ga. for cash or HO. Richard C. Parks, Box 236, Gardiner, Mont.

FOR SALE: Athearn 4 wheel dr. A unit, coach, obsv., gondolas, caboose, flat, piggy-back. Send for complete list. Robert Russell, 561½ E. 5th St., South Boston, Mass.

WANTED: English No. 4000 all metal day coach kits, No. 4100 English all metal combo. in original kit form or fair used cond. State price without trucks. C. F. Sherry, 76 Gralia Dr., Springfield, Mass.

SELL OR TRADE: HO equip. AF HUDSON, 3 diesels, 80 frt. cars, buildings, other items, used very little. Trade for Lionel 0 ga. or will sell cheap. Stamp for list. Eugene Zank, 1717 Hickory St., Alma, Mich.

SELL OR TRADE: Lionel O ga. layout, including two complete trains, track, switches, access., 275 watt ZW trans. Best offer or trade for HO Jerry Huth, 16191 Gilchrist, Detroit 35, Mich.

SELL OR TRADE: Surplus signal relays. Want cash, excel. loco, 2 and 3 light signals or molds. Chase Willett 29454 Sheridan St., Garden City Mich.

TRADE: .049 model airplane engine with plane & telescope with 45X 75X, & 100X lenses for Mantua Mike or Pacific. Peter Klain, 614 E. Ashman, Midland, Mich.

SELL OR TRADE: 12 locos, many new; 6 str pass kits, excel HO equip. List on request. Lee P. Durham, 6041 Cabanne Place, St. Louis 12, Mo.

WANTED: O ga. Pittman (street car) Trolleys with original DC 203, under the floor motors, must be in good running cond. No trade, will buy. Vincent J. Metzger, 3701 California, St. Louis 18, Mo.

FOR SALE: Fleischmann HO sec tr sw. and pwr. In fair to good condition. Worth $60, at half price. Send for list. Huntley, 1238 Bellaire, Bellevue, Neb.

TRADE: Have O ga. 0-4-0, cars, and many parts—Athearn, Walthers, Scale Craft, etc. Want HO, especially diesel engines. Lt. Michael N. Danielson, 2 Bonner Rd., Offutt Air Force Base Omaha 13, Neb.

WANTED: Bowser Mountain 4-8-8 new kit, used or repairable cond. State price and whether drivers are flanged, spoked or disk. Ans. all replies. T. C. Lamson, RFD 1, Newington Rd., Portsmouth, N. H.

FOR SALE: HO Railroad including 100 pcs. snap trk. 5 switches—w/motors, Hobbytown diesel, Hekimer diesel, 15 frt. cars, 4 pass. A less than a year old. All for $10 First offer takes. H. Groot, 28 Highland Ave., Dumont, N. J.

SWAP: All Nation "O" F-7 Road Diesel Locos. A-B-A (3 new kits) with Mars light, worth $180. Want Tenshodo U.P. "Big Boy" 4-8-8-4 articulated, Hudson, V&T 4-6-0, Unite "Shay," or make offer. Howell Da 300 Vail Ave., Dunellen, N. J.

FOR SALE: AF S ga. equip.—beacon light, water tower, billboard, u coupler, etc. Plasticville houses, store etc.—complete town. Send for li Sell or trade for HO equip. cars, et Bill Hebenstreit, Route 9, Fork River, N. J.

FOR SALE: HO layout. scenery bldgs, etc. Gilbert HO Hudson whistle, s&s, 4 frt. cars, Monopac pack, 3 switches. (Built up). Wister, 201 Belmont Ave., Jersey City, N. J. HE-4118. Nearby buy only $70.

FOR SALE: All Nation 3 unit dies A-B-A. All units powered, test ru not painted. $100 FOB. P. Maur 98 Brookfield Ave., Nutley, N. J.

FOR SALE: Large HO layout, 9 locos, 48 cars, etc. Mantua Pacific $22. Mike $23. Penn Consolidation $26. Casey Jones $18. English Pacific $17. MDC 0-6-0 $15. Varney Switcher $15. Mantua Sharknose A&B $16 for both. George Waldheim, 530 Chestnut St., Kearny, N. J.

FOR SALE: Lionel 0-27 loco 2035, 5 cars, automatic coal loader 397, transformer, 10 switches, about 135 pieces of track, etc. About four years old. Make bid. Paul Stephanus, 212 Walnut St., Montclair, N. J.

TRADE OR SELL: Lionel Std. Ga. engine 381 elect., stock car, obs. car, Pulman, baggage, 2 hand switches, 28 straight track, 16 curved track, 3 half sections. Want HO. All mail answered. Robert Andrewski, 176 Brookdale Ave., Newark 6, N. J.

FOR SALE OR TRADE: 0-27 Lionel track, 8 to a bundle. Barrel and cattle loader, switches. Trade for Gargraves 3 rail track or cash. All in excel. cond. Stan Trzoniec, 2237 Elizabeth Ave., Scotch Plains, N. J.

FOR SALE: Lionel Trainmaster Transformer type RW $10. Automatic gateman house No. 145 $4.50. Crossing gate No. 252 $2.50. All in good condition. J. A. Bidwell, 90 River Dr., Titusville, N. J.

FOR SALE: American Flyer Silver Rocket diesel (2 units). Trade for AF K4 Pacific (PRR) steam loco, or will sell engine for $25, pp. Link coupler cars and rail. For further information send for price list. Edward C. Davis, 1285 Merriam Ave., New York 52, N. Y.

FOR SALE: "S" ga. scale and tinplate: Nord, Rex, Enhorning locos, frt. cars all manufacturers, Tru-Scale roadbed and switches, brass rail, Nimco driving wheels, AF trucks. Or trade for HO United engines. Bob Dezelin, 190-02 117 Rd., St. Albans 12, N. Y.

FOR SALE: Lionel "00" ga. layout, Hudson loco, 8 cars track and switches. All in perf. cond. Highest bid taken. C. Freeman, 542 B. 113th St., Belle Harbor, N. Y.

FOR SALE: HO Rolling stock and other items superbly detailed—Mantua couplers. Send stamped envelope for list. P. C. Hitchins, 9 Myrtle Lane, Levittown, N. Y. PE 5-4744.

FOR SALE: Books. "Locos of W. P.," recent Car Builders Cyclopedia, Trains albums, "RRing Modern Way", "Western Maryland Story," *RMC* for 1953 (complete)—or trade for HO rolling stock, locos, elec. equip. Robert Marks, 471 Dunster Dr., W. Hempstead, N. Y.

FOR SALE OR TRADE: Scale "O" locos, cars, buildings, etc. Old Std. & "O" tinplate, late Lionel equipment. Want HO. Send stamp for listings. W. B. Phillips, 2305 East 23rd St., Brooklyn 29, N. Y.

TRADE: $300 AF—3 locos, log loader & car, Elec. crane, pr. man. sws., crane car, oil sup. depot, frt. cars, boom car, beacon, Lionel oper. oil der. For what have you in HO. William Rolen, 664 Bergen Ave., Bronx 55, N. Y. (We had to cut this long one in half. Please keep 'em short. Ed.)

FOR SALE: Lionel O ga. 1950 electronic train set. Lionel Std. locos: 400E, 392E, 390E, 402, 408E. 072 ga. engines: 763 EW, 227E, Marklin solid rail 072 rail electric switches plus 45° crossovers. Ben Smith, 265 Tompkins Ave., Brooklyn 16, N. Y.

FOR SALE OR TRADE: AF S ga. Crossing gate, hand car, semaphore, Atlantic loco, Pullmans, track, switches, 90° crossing. Stamped self-addressed envelope for list. Want US mint plate blocks. Gilbert Starr, 1197 Anderson Ave., Bronx 52, N. Y. (Please, please, keep ads short!)

FOR SALE: HO equip. Valued at $85. Mantua Pacific, flexi-track, roadbed, power pack, other essentials. Brand new. Also excellent stamp collection. Donald Spragg, 290 Dewey Ave., Washington, Penna.

TRADE: New AF S ga. 0-8-0 NP switcher. Pul-Mor S&CC knuckle couplers. Want AF S ga. GP-7 diesel switcher or other diesel. New condition. C. E. Thomas, 4 Concord Ave., Bethpage, N. Y.

FOR SALE: 120 base Catena Accordian, 3 shifts, Prof. model, excel. cond. Forster 31 airplane engine Jim Walker U. Reely Control. Or trade for HO. Leon Tomash, 61-16 163rd Ave., Flushing 65, N. Y.

FOR SALE: HO equip.: 3 pr. Atlas auto. switches, 60 Atlas snap track, 90 W Lionel trans., 2a rectifier. All brand new. Penn Line 0-4-0 switcher, good cond. Freight cars, wrecking crane. Answer all offers. Richard Trilling 762 St. Marks Ave., Brooklyn 16, N. Y.

FOR SALE: Lionel cars in good cond. Sell separately. Send stamp for list. David Starkey, 36 E. Weis Rd., Albany, N. Y.

FOR SALE OR SWAP: HO train and access. $25 or "K" series Kusan-Auburn equip. Philip Lawton, 80 Saratoga Blvd., Gloversville, N. Y.

WANTED: "Illinois" State car to complete a set. Lionel 8840 Power House, good cond. AF 4687 loco. Have Trix track. Sell. Trade. G. Frank, 42 Willets Rd., Harrison, N. Y.

SELL OR TRADE: Ives, Lionel and AF Std. and O ga. equip plus catalogs back to 1914. Old Model Builders, MRD and *Toy Train* magazines. Want other catalogs and equip. State trade items. John Brophy, 33 Washington Ave., Kingston, N. Y.

TRADE OR SELL: Trapping outfit, stamp collection, photo developing outfit. Trade for HO. Send for list & tell what you have. Also sell CB, 2 trans., rheostats. J. Doherty, RFD, Liberty, N. Y.

SALE OR TRADE: Lionel Std. ga No. 8 electric engine, pass, cars, gondola, derrick, tanker, searchlight car, and track. Want modern 3 rail 0-27 equip. H. O. Loewer, 164 68th St., Niagara Falls, N. Y.

FOR SALE: 2 custom built power packs. Twin 20 amp. with meters, $40. Twin 15 amp $30. HO Varney 2-8-0 with Lindsay motor, sprung drivers, detailed $40. Stubby $12. All excel. cond. T. G. Busack, 718 Genesee St., Olean, N. Y.

FOR SALE: RAILROAD MODEL CRAFTSMAN 1934 to 1952; Model Builder 1940, '41; Railroad Stories 1936 to 1948; Toy Trains 1951, '52; Trains 1947, '48; Model Railroader 1939-1942, 1946, 1947. Edward A. Moran, 3300 Netherland Ave., Riverdale, N. Y.

WANTED: Marx collector offer $5 for Hocking Valley Gondola (3/16 size, 3000 series). Want C & O flat and other 3000 series; 4 and 8 wheeled 6" cars, Litho'd and C. P. locos, tenders. N. E. Brown, 414 Central Ave., Rochester 5, N. Y.

TRADE OR SELL: Varney O ga. 10 wheeler kit, 2 open end coaches, $44. Custom built 10 wheeler, $90. Trade for HO Pennsylvania prototype diesels, steam locos. Ed. Goodman, 415 Lyceum St., Rochester 9, N. Y.

SELL OR TRADE: 15 Lionel cars, engines, trk, trains, access., parts. $250 or trade for Colt muzzle loading revolvers of equal value. Also HO—5 engines, 15 cars, 13 sws., mounted on table. Trade for Colt pistols. Joe Scales III, Leaksville, N. C.

FOR SALE: Large assortment of Lionel trains and access. Send stamp for list. John Krois, 723 Barney Ave., Wyoming, Cincinnati 15, Ohio.

FOR SALE: 2 complete central loco works "O" ga. 4-8-4 Northern kits $110 ea. express collect, or consider trade for Max Gray Penn. II, J1, Santa Fe 4-8-4. Chas. Schwarm, Stroschen Dr., Cincinnati 11, Ohio.

TRADE: $150 US and foreign stamp collection for $50 worth of anything in HO. Ed Accetulla, 1832 Antietam St., Pittsburgh 6, Penna.

WANTED: Pay any reasonable price for Feb. & Nov. '52 *Toy Trains*. Must be in good cond. Buy or trade for pix. Also want Pen Pals. Paul L. Emch, 1506 E. 173rd St., Cleveland 10, Ohio.

FOR SALE: Penn Scale models 1600 HP Switcher, like new, $15. Robert H. Nuhn, 630 Princeton Ave., Elyria, Ohio.

WANTED: "OO" ga. locos and parts. Trade antique equip., Lionel O and 027, Marx, AF S ga., and HO gauges. new and used. Clyde Buxton, RR 2, Loveland, Ohio.

TRADE: Athearn HO Kansas City Southern pulpwood car for HO ga. box car. Give road name and manufacturer when answering. J. R. Garey, 134 Fulton Ave., Newark, Ohio.

SELL OR TRADE: Poors "South Park," Cafkys "Rails around Gold Hill," Beebes "Mixed Train Daily." All perf. with dust jackets. Want HO equip., especially old time steam or articulated engines. Arthur W. Weiland 7473 Columbia Rd., Olmsted Falls, Ohio.

TRADE: HO Revell UP diesel switcher, Walthers U-619 power trucks, new Kurtz-Kraft double automatic crossing gates, 2 new NMRA electric train control kits, 4 new surplus rotary switches, new Megow electric automatic ramps. HO list exchanged. Kenneth Hiatt, 1859 Coles Blvd., Portsmouth, Ohio.

FOR SALE: Herkimer diesel pass. set, Santa Fe diesel A, combin., coach, 18 sec. snap track, Unipack U-55. All new and in good cond., $30. Mike May, 4310 South Pitts., Tulsa 5, Okla.

TRADE: A.F. Hudson, tender, good cond. For Lionel diesels, fair cond. Charles Ellis, Box 53, Troutsdale, Ore.

SELL OR TRADE: Fleischmann track circles of 24" and 14½ rd., pr. sws., 23 pcs. str. First offer over $7. Trade for Athearn $6.95 diesel, must run good. Gary Klein, 55 4th St., California, Pa.

WANTED: Scintilla DynaPack M. III. State price and cond. Will pay postage. Rick Berry, 108 N. Rolling Road, Springfield, Penna.

SALE OR TRADE: Complete layout, including steam and diesel locos, cars and power pack, good cond. Send for list. Bob Stover, 430 Andover Road, Fairless Hills, Penna.

TRADE OR SELL. A Unit Hobbyline B&O, perf. cond. for H.P. 0-6-0 switcher (TT) or sell $17. Also trade for TT or sell other HO equip. 3 cent stamp for details. Berry McMillan, 2078 Kent Road, Huntingdon Valley, Penna.

SELL: Lionel 6464 series box cars, $3.50 ea.; 6462 gondolas, $3; 3562 barrel $4.50; 6415 tank $3.50; 6257 caboose, $2; 6468 automobile $3.50; 3464 operating box $3.25; other items. Cond. perfect. John Bayne, 4 Iona Ave., Narberth, Penna.

SELL OR TRADE: Lionel & AF catalogs, timetables, over 100 various model mags. including *RMC*. 15 years Popular Science Monthly. Want tinplate, catalogs or HO trolley. W. H. Larkin, 138 E. Louden St., Philadelphia 20, Penna.

WANTED: Old Lionel Ives AF Std. ga. trains and equip. Have Lionel, Ives, AF catalogs and other Std. ga. items to trade or sell. Also a few new and old O ga. to trade or sell. James McCloskey, 2534 Aspen St., Philadelphia 30, Penna.

SELL OR TRADE: 736 Berkshire, 41 switcher, gang car, Oper. Access.: log, diesel coal, ice depot, crane, barrel, horse corral, hopper ramp. Oper. Cars: Sell $125. Trade 773 & 203 or Offer? Thomas R. Stetson, 575 5th Street, Brooklyn 15, N. Y. (Please shorten ads or next time we'll have to return them. Ed.)

WANTED: Varney Pacific or Mikado, Bowser Challenger. Need not be in running condition. Trade other engines or pay cash. Jack Davis, 347 Eckard Ave., Akron 14, Ohio.

FOR SALE: HO Varney all brass 2-8-4 (very good), 4-6-4 (excellent), with tenders, $40 ea. or $75 both. Also Varney metal diesel A, $9 and Globe diesel A. Lindsay power $7. R. S. Woods, 2504 Parkwood Rd., Chattanooga, Tenn.

FOR SALE: HO 25 pc. layout. Send self-addressed envelope, stamped, Wayne Strickland, 1703 North Hills Blvd., Knoxville 17, Tenn.

FOR SALE: HO equipment, excel. cond., 8 engines (2 Tenshodo GP-9s), 24 frt. cars, 3 pass., 2 power packs, trk. & access. Stamp for list. A. V. Siragusa, 4607 Holt St., Bellaire, Texas.

FOR SALE OR TRADE: Lionel "O" equip. 6 locos, 18 frt, 12 AMT pass., trk, switches, bldgs., trans., access. Trade for "O" ga. Scale. Prefer SP Prototype. Mike Jones, 6150 Kenilwood Dr., Houston, Texas.

SWAP: Have blueprints and pictures —Southwestern equip.—3 unit HO diesel—Want English Mike—Pacific —or MDC Atlantic. Chas. M. Mixell, Jr., 6623 Santa Fe Ave., Dallas 23, Texas.

FOR SALE: Tenshodo HO Challenger, GP-7, F-7 A-B 5 pass., 16 frt. cars. 6x12 double track layout with yards. 10 switches. Double rheostat, pack, 6 DPDT and 12 switch control. Capt. Koch. 813 Kern, Killeen, Texas.

FOR SALE: O ga. scale 2 rail model railroad layout. Steam type locos, diesels, and 1 live steam. All frt. and pass. cars in good cond. Two articulateds built for short radius curve. Write for list. R. F. Buford, 1214 W. 6th St., Texarkana, Texas.

WANTED: Ulrich B&O W.M. Hoppers (old style heralds) Globe box and tank cars, built up kits. Armand Prems, Box 134, Enosburg Falls, Vt.

SWAP: Eastern US rr color slides, 35 mm, for overseas rr slides. Prefer steam or electric. C. E. Young, 106 Hallman St., Fairfax, Va.

WANTED: Lionel 700 and 2900 series freight cars and scale Hudsons. Scale track, either inside or outside 3rd rail. Pay reasonable price or trade Lionel. R. L. Martin, DDS, 321 24th St., Virginia Beach, Va.

TRADE: Entire stamp collection with album, 225 stamps mounted and about 2000 loose world wide, one stamp worth $7 included. Want HO Pacific loco w/tender and GN caboose. Must be in good cond. Russell Timms, 5201 S. Tacoma Way, Tacoma, Wash.

WANTED: Lionel Std. ga. cars and engines. State cond. and price. Ted Ahlberg, 6610 Hiway 99, Vancouver, Wash.

SWAP: HO Mantua Pacific, excel., and MDC with tenders for Articulated. Has a few valve gear parts missing otherwise good cond. Or sell for best offer. Robert L. Laudon, 1927 E. Hillcrest, Milwaukee Wisc.

FOR SALE: AF "O" ga. cars, single dome tank car, box car, caboose, pr. remote control switches. All good cond. Cars $1.50 ea.; switches $5 pr. $7.50 buys lot. Fred Jaeckle, 4515 North 158th St., Milwaukee 10, Wisc.

FOR SALE: Varney F3 A unit with "Brute" power w/8 wheel dr. with dummy "A" "B" unit. Fair cond. First $25 takes it or make offer. J. M. Bickel. Reeseville, Wisc.

SELL OR TRADE: 0-4-0 switcher, Penn midget diesel, switches, switch machine, power pack, semaphores, etc. Want period locos, coaches, or HOn3. G. C. Seagraves, MD, 1025 Jones St., Honolulu, Hawaii.

TRADE: Want Mikado or Berkshire loco HO in exchange for C38 Australian Pacific loco or Australian RR books, souveniers. Frank Slovnik, 6 Burringbar St., North Balgowlah, N.S.W., Sydney, Australia.

CORRESPOND: With teen-age modeler in the state of Maine, Portland City preferred. Reggy Boucher, 10147 Garnier St., Montreal 12, P. Q.

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RAILROAD ILLINOIS TERMINAL COMPANY
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"The D&H"
Chicago GREAT WESTERN Railway
MISSISSIPPI CENTRAL

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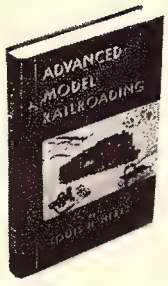

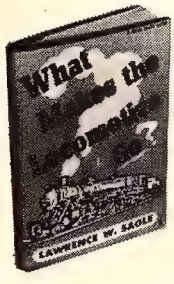

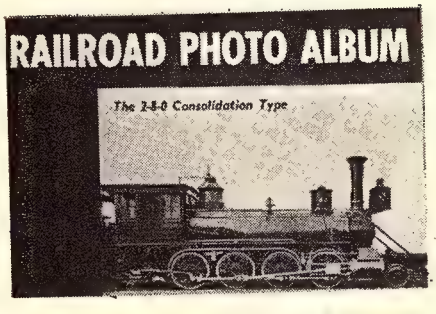

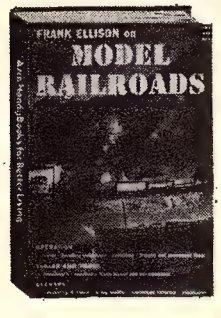

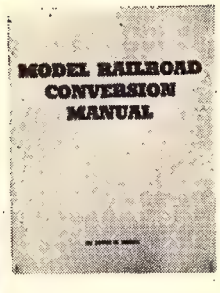

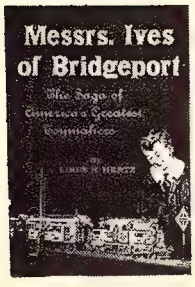

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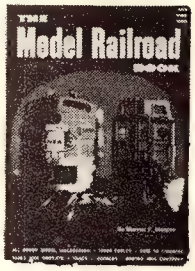

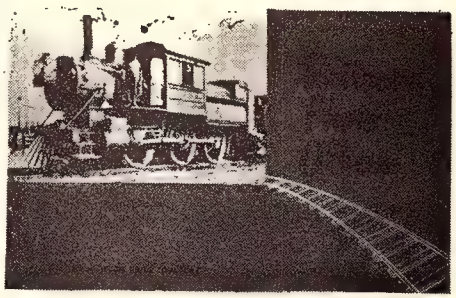

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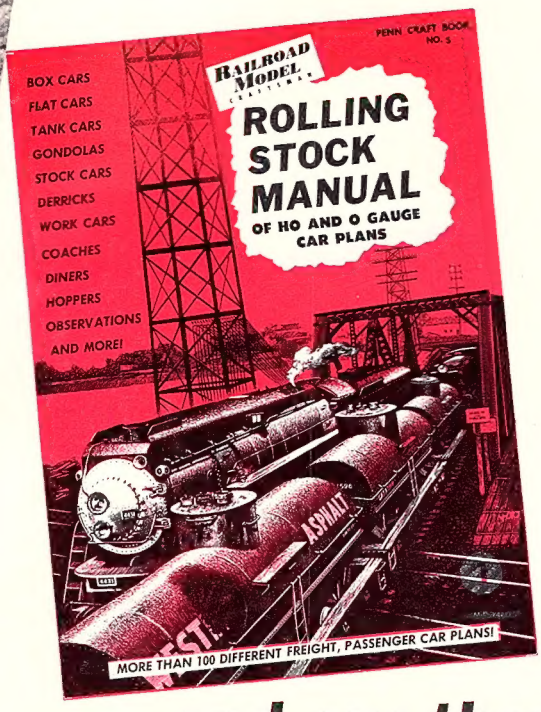

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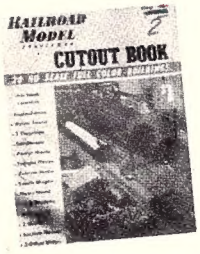

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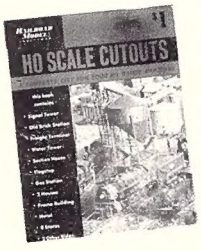

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